

Volume 7

April 2011

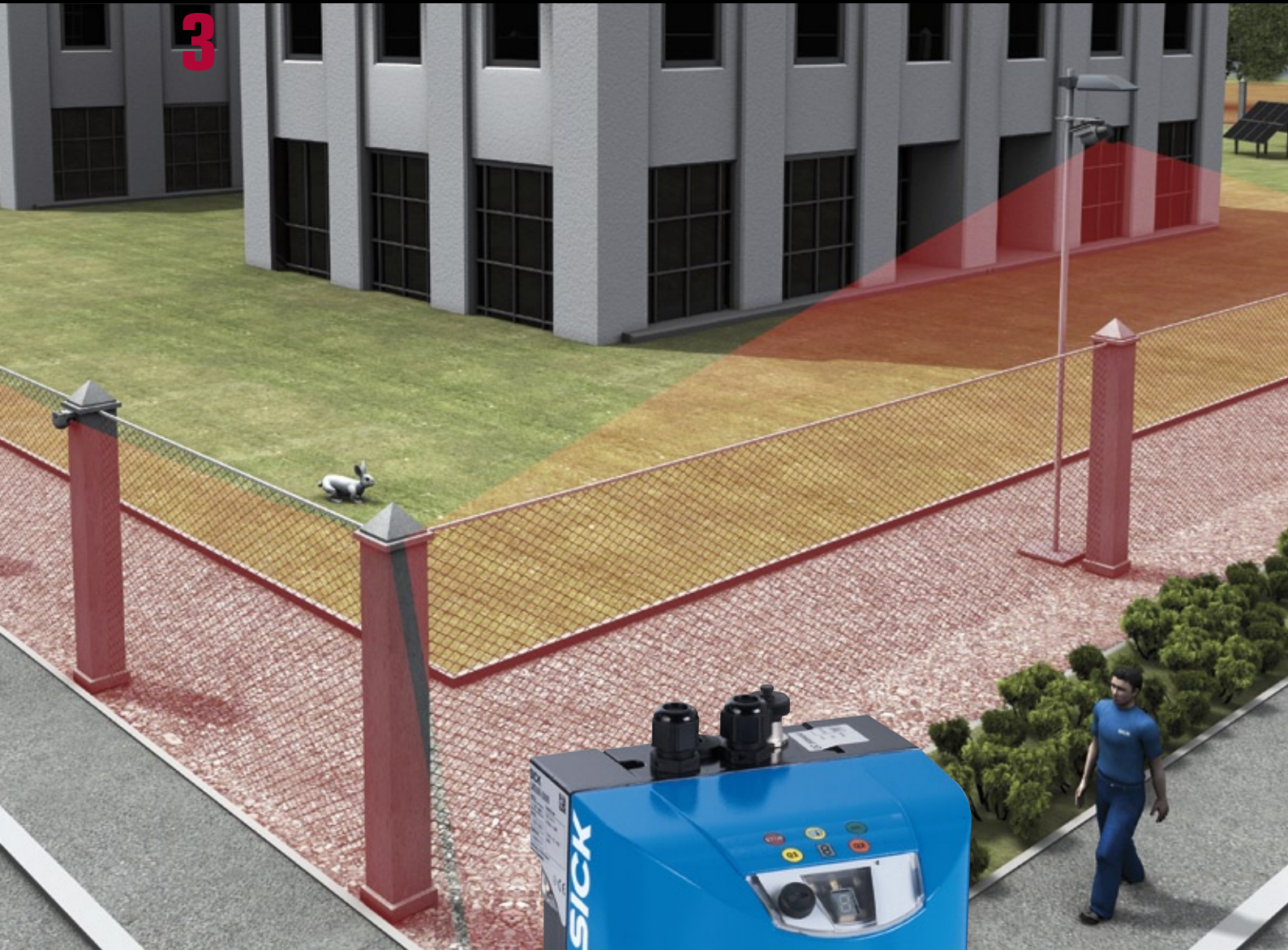
GIT

EMEA Edition

SECURITY

MAGAZINE FOR SAFETY AND SECURITY

3



Perimeter Protection

Security for the Retail Business

Fire Protection

Security for Hotels

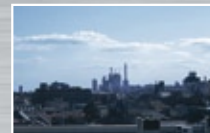
IFSEC 2011

**COVER: SICK Cutting-Edge
Laser Technology**

SICK
Sensor Intelligence.

GIT VERLAG
A Wiley Company

Everything in sight



Please visit us in Birmingham
IFSEC, Hall 5 Booth E25
May 16-19, 2011



MP MEGA
PIXELS

Megapixel Vari Focal lenses

▶ 1/3"	YV2.7x2.2SA		3 MP	f = 2.2~6 mm
	YV2.1x2.8SR4A	D/N	3 MP	f = 2.8~6 mm
	YV2.8x2.8SA		3 MP	f = 2.8~8 mm
	YV4.3x2.8SA		3 MP	f = 2.8~12 mm
	YV10x5HR4A	D/N	1.3 MP	f = 5~50 mm
	YV3.3x15SA		3 MP	f = 15~50 mm
▶ 1/2.8"	YV3.3x15HR4A	D/N	1.3 MP	f = 15~50 mm
	YV2.7x2.2SR4A	D/N	3 MP	f = 2.2~6 mm
▶ 1/2"	YV2.8x2.8SR4A	D/N	3 MP	f = 2.8~8 mm
	DV3.4x3.8SA		3 MP	f = 3.8~13 mm
	DV10x8SA		3 MP	f = 8~80 mm
▶ 1/1.8"	DV10x8SR4A	D/N	3 MP	f = 8~80 mm
	DV3.8x4SR4A	D/N	3 MP	f = 4~15.2 mm

Fujinon. To see more is to know more.

Risk Analysis

When you work at a job for some years, you benefit from a certain experience that helps you to cover daily tasks without getting nervous when smaller problems arise. Establishing routine processes additionally eases up the main work load and makes a team resilient against trouble.

The drawback of routine and established workflows occurs if there are no mechanisms implemented to pose and answer critical questions.

"Nothing ever happened in the past, so why should something go wrong in the future." If you hear a sentence like that, you should be alarmed. Lax discipline is not acceptable in the safety and security business. One does not have to look at what happened with the "100% safe" power plants in Fukushima in Japan to realize that despite advanced technology, there is always a risk that something could go wrong. To believe that an IT system is not vulnerable against hacking attacks, to believe that no one in a security team may turn to the wrong side or to believe that the whole staff takes safety and security measurements seriously, is possibly the first step into a disaster. It is necessary to get out of the routine from time to time and analyze possible risks. If you fear that your staff is blinded by routine, an external advisor is a good choice and helps to avoid that a company turns a deaf ear to new ideas.



A white paper from RWE, one of Europe's five leading electricity and gas companies, is currently causing more than a few waves in the access control market. Together with the Security Research Lab in Berlin, the company did exactly what we recommended to you. They did a thorough risk analysis against the background of the security weaknesses of various RFID technologies used in access control that have been published recently. The white paper was published under the very appropriate title of "Establishing Security Best Practices in Access Control" and you will find an interview about this on page 8 of this issue.

If you have some more time in addition to your daily routine and have a closer look at this issue, you will find more ideas and new product developments that will help you. Also a visit to the IFSEC and Firex in Birmingham in May is certainly a good idea to get an overview of what happens in the industry and you are more than welcome to visit our team there at

GIT's stand in Hall 4 Stand H120.

Enjoy reading this issue!

Heiko Baumgartner

www.GIT-SECURITY.com

REGISTER NOW for our
free NEWSLETTER

RFID-Technology for Innovative Access Control

proxMagic®

• **High Flexibility**

One reader for all proximity technologies.



bioProx®

• **Double Security**

Contactless access control and biometric verification.



tranSpeed

• **High-Speed Access Control**

Vehicle access and car park management for indoor and outdoor installation.



proxSafe®

• **Perfect Control**

Secure and electronically recorded management of keys and valuables.



deister electronic 

deister electronic GmbH
Hermann-Bahlsen-Str. 11
D-30890 Barsinghausen
Tel: +49 (0) 51 05 - 51 61 11
www.deister.com

The RFID Company



22

COVER

Cutting-Edge Laser Technology
Safe and Reliable
Monitoring of Open Terrain

8

CORPORATE SECURITY

Security without Obscurity
RWE Introduces a Company-wide Secure Access Control Solution

24

PERIMETER PROTECTION

The Right Chemistry
Thermal Imaging Cameras Secure the Perimeter of Industriepark Höchst

37

CCTV / PUBLIC SECTOR

Beauty Is in the Eye of the Operator
Video Walls with outstanding product design

EDITOR'S NOTE

Risk Analysis

Heiko Baumgartner

MANAGEMENT

CORPORATE SECURITY

Security without Obscurity

RWE Introduces a Company-wide Secure Access Control Solution

EVENT

Security Solutions on an International Scale

Ifsec, International Firex and Safety & Health Expo 2011 at the NEC in Birmingham

SECURITY

3

IFSEC

Welcome to Samsung City

14

Net Profits

Network Cameras from Axis at Ifsec

15

Scalable, Efficient, Flexible, Reliable...

16

8

Measures against Card Cloning

End to End Security with CEM Systems

17

Designed to Make IP Simple

Panasonic Showcase Developments in Security Solutions at Ifsec 2011

18

COVER STORY

Cutting-Edge Laser Technology

Safe and Reliable Monitoring of Open Terrain

22

PERIMETER PROTECTION

The Right Chemistry

Thermal Imaging Cameras Secure the Perimeter of Industriepark Höchst

24

Securing the Gateway to Paradise

Mauritius Airport Extends the Value of Its Surveillance Investment through Integration

30

CCTV

Generating Efficiency

Innovative Use of IP Video Surveillance Helps Power Plant Operation

34

CCTV / PUBLIC SECTOR

Salamanca City Surveillance

Protection against Vandalism and Theft

36

Beauty Is in the Eye of the Operator

37

CONTROL ROOMS

Square Eyes

An Advance Look at Some Eyevis Products on Show at Ifsec

38

VIDEO MANAGEMENT

Till 16 Free

Axxon Smart Pro 2.0 Offers a Solution for Small- to Medium-sized Systems

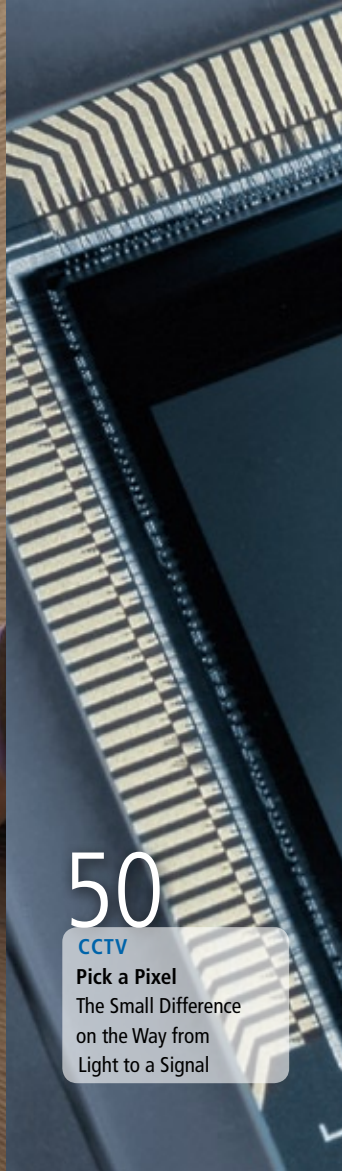
40



44

SECURITY FOR HOTELS

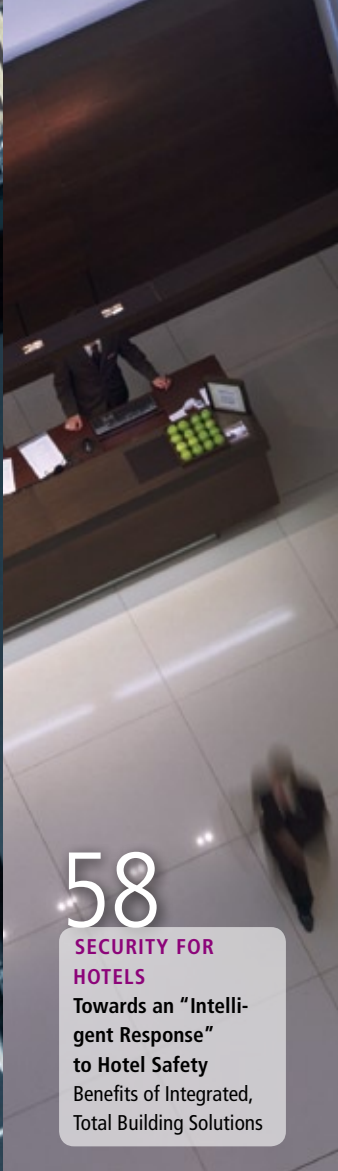
A Successful Symbiosis
Electronic Access in New and Historical Architecture



50

CCTV

Pick a Pixel
The Small Difference on the Way from Light to a Signal



58

SECURITY FOR HOTELS

Towards an "Intelligent Response" to Hotel Safety
Benefits of Integrated, Total Building Solutions

SECURITY FOR RETAIL BUSINESS

Effective Bundle
EAS Product Suite Designed Specifically for Smaller, Value-conscious Retailers

SECURITY FOR HOTELS

A Successful Symbiosis
Electronic Access in New and Historical Architecture

CCTV

Built for a Long Life of High Performance
A Tough Display Built to Execute Critical Tasks and Sustain Demanding Environments

An Improved View through the Ages

How CCTV Systems Have Developed Since Their Invention

Pick a Pixel

The Small Difference on the Way from Light to a Signal

CCTV / POWERPLANTS

Sunshine Secured
Addressing Security at Photovoltaic Power Plants

FIRE PROTECTION

SECURITY FOR HOTELS

Towards an "Intelligent Response" to Hotel Safety
Benefits of Integrated, Total Building Solutions **58**

FIRE DETECTION

Installing Patiently
Apollo Technology Chosen for £1 Billion Hospital Redevelopment **62**

FIRE PROTECTION

Building Construction Using Technical Textiles
The EU ContextT Project **64**

INTERNATIONAL FIREX / IFSEC

Sensitive Detection Plus Advanced Alarm Technology **68**

SECTIONS

News 6
 Security Products.....19, 53
 Fire Protection Products 67
 Business Partner 69
 Company Index/Imprint..... 74



Touch

me!

DVTel Announces New President & CEO

DVTel announced the appointment of Yoav Stern as President & CEO. He will also serve as a Director on the company's Board. He replaces Eli Gorovici, who will be stepping down after almost ten years in the position. Gorovici will remain involved in the firm as an advisor to the CEO, and will help supervise certain strategic projects. Yoav Stern has substantial experience in the homeland security industry. He was CEO of an international publicly traded company in the Homeland Security business, and was lately serving as an advisor to the boards, shareholders and management teams of a number of large International corporations and private equity firms from the USA, Japan and Asia, where he has specialized in mergers & acquisitions and strategy development and implementation.



www.dvtel.com

Axonsoft European Market Leader

IMS Research has released its annual report titled "World & EMEA Market for CCTV and Video Surveillance Equipment – 2010" which provides an analysis of the condition and trends of the 2009 video surveillance market. According to the report, this is the third year that Axonsoft has held the lead position on the EMEA market (Europe, Middle East, Africa) in the Open Network Video Management Software segment. After starting its global expansion in 2007, the results of that same year put the company at the lead position in the given segment of the EMEA market, which was reflected in the report titled "World & EMEA Market for CCTV and Video Surveillance Equipment – 2008".

www.axonsoft.com

Infinova Joins HD-CCTV Alliance

Infinova announced that it has become the newest member of the HDcctv Alliance and is listed on their website. "By adding a suite of HDcctv-compliant products to its already extensive portfolio of core equipment for video control rooms, megapixel, IP and analog surveillance cameras, specialized cameras, fiber optic communications products and customized systems, Infinova continues to generate new tools and solutions which will help Infinova integrators provide more choices to their end-user customers," affirms Todd Rockoff, executive director of the HDcctv Alliance. "Providing all surveillance camera technologies, Infinova integrators can offer more solutions to their customers, assuring that they choose the right video technology for each and every application," adds Mark S. Wilson, vice president, marketing.

markw@infinova.com

Kaba Expanding in Scandinavia

Kaba Group is acquiring the Møller Undall Group of Drammen (Norway). With this purchase, the company is significantly expanding its position as the second largest provider of locking systems in the Nordic countries, and tripling its selling power in the region. Møller Undall, a family firm with 175 employees, generated sales of around CHF 41 million in financial 2010. The Møller Undall Group is one of the largest commercial suppliers of locking systems and door hardware in Norway. It also has branches in Sweden and Denmark. The acquisition still requires approval from the relevant authorities. Both parties have agreed to maintain confidentiality about the price paid. The acquisition will have a positive impact on Kaba Group's earnings per share.

www.kaba.com

Kaba: Sale of Door Automation Segment

Kaba Group announced the sale of its Door Automation Business Segment to Nabtesco Group of Japan. The transaction was completed on 1 April 2011. The sale price lies between 220 and 240 million CHF. Jakob Gilgen, Member of the Group Management Board and Head of the Door Automation Segment, has left Kaba Group, and will continue to manage that business under its new owners. The Door Automation Segment consists primarily of Kaba Gilgen, specializing in automatic and platform doors, along with its international branches and distribution companies.

www.kaba.com

Seetec Growing Strong

Seetec reports that the company has been able to continue the positive development in the first three business quarters of the fiscal year 2010/2011. The turnover for the business areas software and services has increased by more than 40% from June 2010 to February 2011 compared to the reference period in the previous year. Rolf Senger, co-founder and CEO, considers that development as a strong confirmation of the manufacturer's strategic alignment. "Until 2010, Seetec had also distributed camera hardware in the domestic markets Germany, Austria and Switzerland. In the course of the previous year, we decided to withdraw completely from the hardware business also in those countries and to focus our resources on software and service. As a pure software provider, Seetec can now act even more independent and with a consistent international strategy. The very positive development of our core business areas software and service shows us that this decision has been absolutely right, especially as it has really been appreciated in the market."

info@seetec.de

Basler Annual Report 2010 Published

Basler released its audited annual report for 2010. The camera specialist realized the best results in the company's history in 2010. The group's turnover increased in fiscal year 2010 by 51.3 % to 51.0 million € (33.7 million € in 2009). The gross profit margin increased to 43.5% from 35.0 %. Earnings before taxes increased to 5.0 million € (-7.3 million €). Pre-tax return amounted to 9.8 % (-21.7 %). "The strategic realignment of the company undertaken in the past 18 months, with focus on the camera business has proven successful" says the chairman of the Management Board, Dr. Dietmar Ley. "We will continue developing our product portfolio and our international sales force in 2011 in order to increase the market share of Basler AG for industrial cameras and video surveillance cameras." For 2011 the company expects a positive result in the middle single-digit percentage range due to the unchanged positive trends in incoming orders and sales.

www.basler-ipcam.com



Certified Bosch Voice Alarm

Both of Bosch's voice alarm systems – the mid-end Plena system and the high-end fully digital Praesideo system – have been granted EN 54 certification by accredited notified bodies. Certification includes not only the central voice alarm equipment but also peripheral equipment such as loudspeakers. The company belongs to the first companies in the world to champion the new EN 54 standard for voice alarm systems. Originally introduced as a European standard for fire alarm systems, EN 54 has now been extended to cover voice evacuation to meet a growing trend in the market towards integration of fire alarm and voice evacuation systems. The standard covers three important equipment areas of voice evacuation: EN 54 16 for central voice alarm control and indicating equipment, EN 54-24 for loudspeakers and EN 54 4 for power supply equipment.

www.bosch.com

Senstar with New Managing Director for UK Operation

Mark Novak will head up Senstar Limited, Senstar's UK-based operation responsible for the territories of Great Britain, Ireland and the Middle East. Mr. Novak is an accomplished security professional who has worked in UK, EMEA and USA with Vigilant Technology since 2001 and among other positions there, most recently served as their global Vice President of sales and marketing. The firm's President Brian Rich commented: "We are very pleased to have Mark join our team – his background and experience in leading global organizations through change, increasing sales in challenging times, and selling in the Middle east region, will be of great value to Senstar." Rich added that Novak's experience in working with security consultant specifiers and his channel development background are areas requiring increased focus for his company in this region.

www.senstar.com

Optelecom-NKF Renamed Following Merger

Optelecom-NKF is renamed since April 1st, as a result of its recent merger with the Dutch company, TKH Group. The merger was made definite on January 27th, 2011. Over the past two years, the company has positioned nearly all its surveillance solutions under the Siqura brand name, with the exception of its renowned Optelecom fiber optic line in the US. Once the merger with TKH Group was made definite, it was decided to rename Optelecom-NKF: The EMEA offices are now named Siqura and the company headquarters will be relocated to Gouda, the Netherlands. In order to effectively market the existing Siqura and Optelecom brands as well as the TKH Security Solutions offering in the Americas, the Optelecom-NKF US office will be renamed as TKH Security Solutions USA.



www.siqura.com

Verint Systems Acquires Rontal Engineering Applications

Verint Systems announced the acquisition of Rontal Engineering Applications, a privately held provider of situational awareness solutions. This acquisition expands Verint's portfolio of security intelligence solutions, powering the launch of Nextiva PSIM – a platform that captures information from a variety of security, safety and corporate systems – and enabling the fusion of information for users to quickly and efficiently view, correlate and analyze data to identify, initiate and manage response to situations in collaboration with other security agencies. The platform enables organizations to gain immediate situational awareness and faster response leveraging an intuitive 3D multi-layer user interface, efficient organizational control and management through systemic procedures and standards, contingency planning capabilities for natural disasters and calamities.

www.verint.com

Suprema: Scanners for Poland & Lithuania

Suprema's palm-print live scanner Realscan-F is being used by the Afis (Automated Fingerprint ID Systems) of Polish National Police and Lithuania's Citizenship & Migration Affairs. Polish National Police are using this device for its nationwide criminal Afis operation. It requires live scanners with stringent selection criteria on the image quality and recognition performance. The manufacturer's live scanner has been qualified for the highest standard of FBI certification (IQS Appendix F), and captures single flat/roll, two finger flats, four finger slap, writer's edge and palm prints. The device performs a very high scanning rate of over 15 frames per second (in rolled fingerprint capture), which enables faster processing speed. The scanner is equipped with powerful DSP and run by highly capable image-processing software featuring the manufacturer's live-scan technology. The device also features a color LCD control panel, wide 5.2-inch platen and on-device operation keys. The company also won Lithuanian Government's Citizenship and Migration Affairs project. Funded by European Union, the project replaces legacy Afis equipment with the live scanners in the nation's criminal Afis. The Lithuanian Government is planning to develop and integrate its newly implemented Afis with the European Union's Schengen Visa Information System (VIS) project.

andyahn@supremainc.com

Onssi: Video Analytics Added

Onssi announced the integration of their Ocularis software platform with video analytics functionality provided by Mate Intelligent Video. The intelligent video system can provide alarms in Ocularis related to various modes of detection. This includes directional motion such as a boundary crossing or virtual path crossing detection; a static object like a stopped vehicle or object left behind; or an object removed, which helps to prevent vehicle theft, stock shrinkage or to protect a valuable object. The system can also combine multiple video analytics events using rules dependency to trigger an alarm and to minimize false alarms; for example, at the entrance of an office building, Path Detection followed by Loitering would trigger an alarm only when the loitering is done by a person coming from outside and would filter out the people from the building who go outside. The company has also developed a number of advanced and proprietary video surveillance technologies such as behavior tracking, people and car counting and tailgating detection.

info@onssi.com

American Dynamics IP Solution at Oulton Park Race

Tyco Security Products has announced that its video products have been installed at Oulton Park race track, UK. The solution has been installed by the company's partners Total Security Protection and WOT Security Group. Oulton Park is one of the UK's leading motor sport circuits and is owned and operated by Motorsport Vision (MSV). To enhance operations at the venue, Oulton Park required a flexible, highly resilient video solution that could enhance operations in the race track control room. The project is the first installation in the UK of the new American Dynamics Victor unified video solution – a unified interface that will enable Oulton Park to view, manage and control American Dynamics NVRs and associated fixed and PTZ (Pan Tilt Zoom) IP cameras. Footage and alarms from both fixed Illustra 400 IP cameras and IP Speed-Dome PTZ cameras, will be centrally managed all from one intuitive software client.



www.tycoint.com

Sentry and Viasys Enter Partnership

Sentry 360 has entered into a technology partnership with Viasys. "We have successfully bridged the gap between intelligent video and limited field-of-view cameras", says Thomas Carnevale, President of Sentry 360. Video Analytics are a great source of providing instant alarms of specific detection, but has always been limited to a specific focal length and field-of-view. Mr. Carnevale adds, "Now, with the integration between Viasys' video analytics and Sentry360's cameras, we're empowering 360-degrees of intelligent video with no blind-spots and no moving parts. We really think this is what intelligent video was meant for."

www.viasys-iv.com

High-Definition Low-Light

1080p/720p 50/60fps Camera

HD-IP CAM

- HD 720p Multiple-streaming
- Codecs: H.264 /MPEG-4 /M-JPEG
- CVBS

3M DSP

3G-SDI CAM

- Uncompression video: 720p/1080p
- Video transmission based on coaxial cable
- Bit rate: 2.97Gb/s SMPTE 292M/424M
- One cable (Video/Audio/RS-232C/Power embedded)
- CVBS

Megapixel Camera Module

- Image sensors: 1.3-3M CMOS/CCD Sensor
- Built-in APIM926-EJ-S/Memory
- Digital video output: YUV 4:2:2 16 Bit (SMPTE 274M/296M)
- CVBS output: 560TV or 700 TVL (NTSC / PAL)
- Image adjustable: Peak/BLC/XDR/3D DNR/A.E.S./ DC-IRIS/removable IR-Cut
- Communication: RS-232C/OSD
- Low power consumption

MINTRON ENTERPRISE CO., LTD.
 No.123,Wu-Kung 1 Rd., Wu-Ku Industrial Park, Taipei (248), Taiwan
 Tel : 886-2-22990277 E-mail: service@mintron.com.tw
 Fax: 886-2-22989375 Web : www.mintron.com Skype: mintron3601

CORPORATE SECURITY

Security without Obscurity

RWE Introduces a Company-wide Secure Access Control Solution

A white paper from RWE is currently causing more than a few waves in the access control market. Together with the Security Research Labs in Berlin, the company published it recently under the very appropriate title of Establishing Security Best Practices in Access Control. It describes the way in which RWE is moving in the direction of a secure access control system in a process being applied company-wide. Matthias Erler of GIT SECURITY questioned Dr. Andreas Rohr of RWE Group Security as Cyber Forensic Manager about the background and details of this project.



GIT SECURITY: Dr. Rohr, you have started a process for the introduction of secure access control at RWE. What drove you to this move?

A. Rohr: First of all, one cannot undertake such a process alone, but one particularly needs the experience of the operative divisions. A new risk analysis became necessary against the background of the security weaknesses of various RFID technologies used in access control that have been published recently. The motivation to consider a new architecture was twofold; firstly the security considerations but also the wish to be independent of a particular integrator or manufacturer. It was therefore not sufficient for us to simply change out the RFID technology that was being used by another that is rated as safe today. Primarily we want to avoid getting in a similar situation again in the future and not letting our security be based solely on one security feature. Apart from that, our aim was a complete redesign to enable the flexible support of all applications that make use of a company ID.

What applications are you referring to and what are their dimensions within RWE?

A. Rohr: We're talking primarily about the access control system and the cashless payment system in the canteen. But certificates for security training are also included, which are legal obligations. Also accounting and time attendance recording are processed with the use of

company IDs. A further component is so-called strong authorization with the use of certificates that are in a PKI smart card chip in the ID. With regard to the scale, at RWE we're talking about a division with more than 150 locations in over ten countries with a total of 70,000 employees and a further 40,000 IDs for external employees (e.g. services or visitors).

RWE carried out an assessment in 2010 with regard to RFID security. What was the result?

A. Rohr: This was a security analysis of the technologies on the market with a focus on the publicized weak points e.g. from Hitag 1, HID prox, Mifare Classic and Legic Prime. This made it clear to us that these approaches, driven by convenience – coupled with advertised but not disclosed 'security features' (security-by-obscurity) – were not leading in the right direction, that is, they were simply not secure. In addition it must be mentioned that a consistent security concept is necessary to secure an object or individual asset. In this sense, the use of RFID-based access control can only be one component of the whole building-related security concept.

Could you give us an example?

A. Rohr: You would certainly not secure a wooden door with cryptographically secure RFID technology, for example. The level of protection aimed for should on the one hand be cor-

respondent to the (technical) security measures and on the other hand be in accordance with the protection requirements of the secured area. To increase the level of protection one can extend the usage of an RFID-based card through the incorporation of further factors such as knowledge (PIN) or possession (biometric features). Beyond this one could check the logging data for technically correct authorization but potential illegal usage – such as with cloned cards.

What features must a system demonstrate from your point of view so that it can be considered safe?

A. Rohr: An indication of the secure architecture of an access control system – as described in the white paper – is the readiness of the manufacturer to lay it open to testing and evaluation – if necessary covered by a non-disclosure agreement (NDA). Thus the actual security is based on the consistent use of open and well investigated standard cryptographic algorithms (in contrast of obscure mechanisms). Said another way, the architecture should be rateable as secure right from its inherent design. The real security level is then dictated by cryptokey management. This includes the secure generation of keys, their secure distribution over the affiliated Secure Authentication Modules (SAM) as well as their use in the personalization environment of access cards. The ability to create all master keys ourselves is seen as essential at RWE, so the key

hierarchy does not start outside RWE as is common with some integrators.

Could you briefly explain the individual phases of the introduction of a secure access concept at RWE?

A. Rohr: Broadly speaking, a total of three phases were carried out at RWE. The security demands of future access control systems were described in the first phase and all the applications within the concern that came into question were taken into consideration. Following that, a target architecture was described that would enable both the existing installations to continue to be operated transparently and simultaneously permit the new implementation in the form of a gentle migration. We developed and implemented the system modules necessary for this in a second phase. Parallel to that the new concept was prototyped at three locations within the scope of new building projects that were running there to gather operational experience of the new systems. This phase is virtually completed and the final phase has already begun, i.e. the actual regular usage in projects where the access technology has had to be renewed. Particularly sensitive areas can now make use of the new RWE Group standard in order to migrate to the required level of security.

Could you describe the new multifunctional RWE Service Card concept a little more closely?

A. Rohr: The main purpose is to have an ID that can be used internationally for all the various different applications throughout the entire RWE Group. This will be first and foremost secure access control and cashless payment in the RWE canteen. But in the future it will also include authentication at computers and services in the RWE IT world using certificates. Three central elements are necessary that then fundamentally support every type of decentrally managed access control or IT system. The three central components are a concern-wide common card management (incl. production), the cryptokey management and a common, workflow-based rights management platform. The necessity for integrative card management is obvious, as a card must be recognized in all relevant systems and is easiest implemented in a top-down method. The associated card production should therefore be multi-client capable and able to produce cards decentrally. Central key management is a precondition for secure operation and must be uniform across the whole concern. An abstraction in the sense of identity and rights management is necessary if you don't want to individually administer the rights of a user in all access control systems (typically one system per manufacturer). In this way every employee can be authorized with his card in every location, regardless of the actual system installed there. All available modules have a defined interface and are thereby able to be substituted. This increases



competition and the variety of products used within the concern, but without building the infamous island solutions. The biggest advantage for the users, such as facility management or individual projects, is standardized manufacturer's products that can be used with relatively low implementation risk.

These are hybrid cards with Legic Prime, Legic Advant and Desfire EV1 – and HID cards are being tested, too?

A. Rohr: Because various technologies are already in use in the existing access control and gastronomy installations a corporate ID must be a hybrid card with various RFID chips so that backward compatibility is ensured. Alternatively one could certainly use readers that can handle the various cards. However, it is then almost impossible to set a uniform security level (for each area). For this reason, for the implementation of the new design in new buildings and refurbishments, we decided not to worry about compatibility to some old cards, so employees with access to these areas then get a hybrid card. In this way a prolonged exchange is possible for a period of time and complete replacement is not necessary. Only new hybrid cards will be used for all new systems with cards and card production.

To what extent are you working with other companies on this project?

A. Rohr: RWE is just one company that is currently in a phase of redesigning its company IDs and access control. The reasons for this are manifold and we are in close contact with other large companies in the Dax 30. All have in common that they believe just copying previous approaches with the change to new RFID technology only is not the way to go. We are in

close contact with chip manufacturers and also with the development departments of leading providers of access control equipment. To date, no products are on the market for a centralized key and rights management system that met the list of requirements. So we developed a suitable generic, secure key management system in cooperation with another Dax 30 company and the Security Research Labs in Berlin. In the area of rights management, we are currently running a study and investigations into the limits and prerequisites for a generic access rights management in a heterogeneous environment. Further on it is intended to write an industry standard into the development books of the various manufacturers that in the end will lead to lower implementation risks for the supplier and the customer and to more flexibility in the final selection. In the future there should be no more customizing effort to integrate the various access control systems because otherwise this leads to extra work during the entire lifecycle and increases complexity in lifecycle management.

Dr. Rohr, many thanks for the conversation.

The "Establishing Security Best Practices in Access Control" white paper is available at <http://bit.ly/huCrSD>



► CONTACT

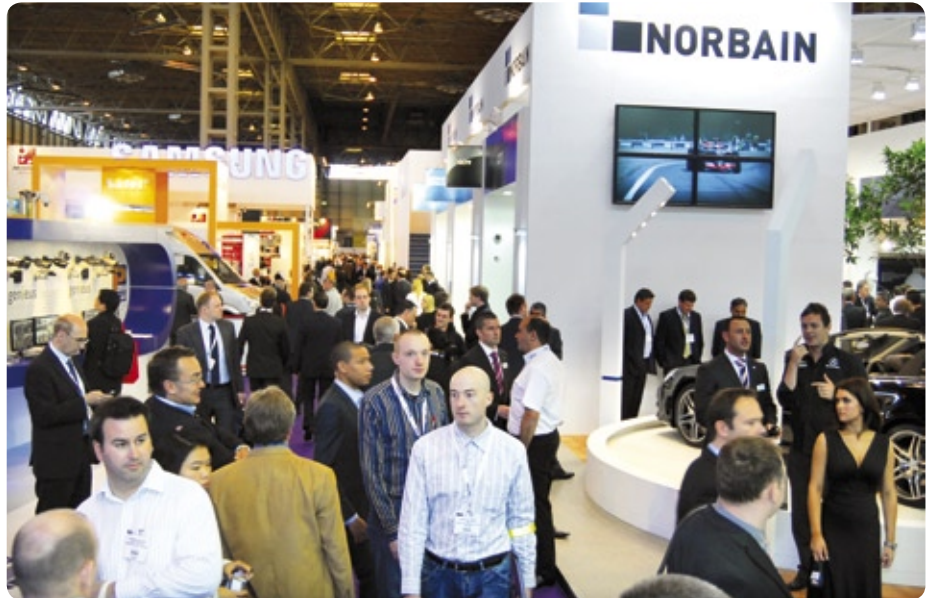
Dr. Andreas Rohr
RWE AG, Essen, Germany
Tel.: +49 201 12 15671
andreas.rohr@rwe.com · www.rwe.com

EVENT

Security Solutions on an International Scale

Ifsec, International Firex and Safety & Health Expo 2011 at the NEC in Birmingham

The diverse, complex and constantly evolving safety and security markets mean that senior security professionals and decision makers need to ensure they remain that one step ahead of the game. Continuous industry changes and best practice methods are not to be taken for granted, as the consequences could be devastating. As such, the opportunity to embrace and explore unrivalled, innovative, security solutions on an international scale, is one not to be missed. Two of the shows related to Safety and Security, Ifsec and International Firex open their doors from May 16–19. Safety & Health Expo 2011 is open from May 17–19.



Ifsec 2011

Ifsec 2011, the world's largest annual security event incorporating a broad spectrum of security products and services, is returning to the Birmingham NEC. As the must attend event for visitors from all disciplines within the security sector and across the globe, security professionals are invited to take advantage of free educational content, network with leading experts and share industry knowledge at Ifsec this year. Illustrative of Ifsec's 38 year history, educational content is a vital aspect of the Ifsec 2011 event. The varied and interactive Ifsec Conference, which takes place during the first two days of Ifsec, includes a number of experienced practitioners and distinguished security industry figures delivering a comprehensive and business-critical educational programme.

The Conference Programme

Comprised of totally-revamped series of modular sessions the Ifsec Conference seminar schedule is designed to encourage network-

ing and engagement in thought provoking debate throughout the three-day conference programme. Each session is chaired by a leading security figure such as Brian Sims, Editor at Security Management Today Online; Mike Hurst, Vice Chairman-Strategy at Asis UK and Andrew Mason, Head of Business Continuity at PricewaterhouseCoopers. Additional contributions from key industry speakers will ensure that delegates come away from the event having learnt about the advances in security technology and how it's being applied in practice. The sessions have been re-organised into a new modular programme incorporating the four selected vertical modules – retail, financial services, utilities and transport.

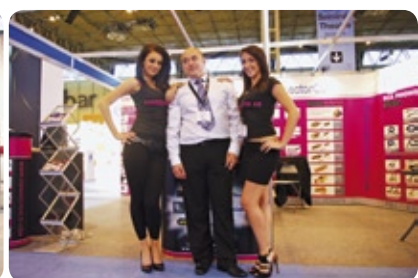
The Conference programme will feature:

- Overarching focus on technology – IP-based security, CCTV, thermal imaging, converged systems
- Cyber-terrorism – what it means for businesses and how to make cost-effective plans

- Addressing the convergence of physical security and IT security

The Big Debate, hosted by Brian Sims, will consist of a high level keynote panel discussing the regulation of the industry in a post-SIA world. Issues such as: What can or will replace the SIA? and Can the industry police itself? – will be among the questions raised. The Big Debate panel members include: James Kelly, BSIA Chief Executive and Chairman of the Security Alliance; Mike Bluestone, Chair of The Security Institute; Patrick Toyne-Sewell, Corporate Affairs Director at G4S and Stephen McCormick, Director of Service Delivery, Security Industry Authority (SIA). The extensive programme also covers Corporate Crime, Cyber terrorism, Retail Security, IP-based Technologies, Security in the finance sector, IT Security, Business Continuity Management, Transport Security and the latest on CCTV & Video Surveillance.

turn page ►



Your Business
Your Network
Your Solution

iPOLiS

Network Solutions from Samsung

Full High Definition
Image Capture

**FULL
HD**

Intelligent
Video Analytics



Scalable
Recording



Remote Viewing
and Control



Management
Software
Integration



Samsung iPOLiS network surveillance solutions

A Samsung iPOLiS network surveillance solution can be tailored to perfectly match the operational requirements of your business.

Using bandwidth friendly technology such as H.264 compression, multiple streaming (H.264, MPEG4 & MJPEG), Samsung Super Noise Reduction and Smart Codec, will put you firmly in control of how and where images are captured and transmitted up to Full High Definition 1080p resolution.

Seamless integration with Samsung SRN series network video recorders, plus a host of third party software platforms, allows you to choose the ideal video management system for your business whilst iPOLiS encoders provide you with the option of integrating conventional analogue equipment across your network. What's more, you can control your system remotely using licence-free Net-i viewer software or the iPOLiS Smartphone application.

Imagination. Innovation. Integration.



IFSEC2011

16-19 May 2011
NEC Birmingham, UK

SAMSUNG CITY | 5/D130

T +44 (0)1932 455 308
E STESecurity@samsung.com
W samsungsecurity.com

Samsung Techwin Europe Ltd.



Exhibition and Pavilions

Running alongside the Ifsec Conference, the Ifsec exhibition is just as extensive. Packed full of international exhibitors, the Ifsec exhibition will be divided into six product area categories: Access Control; CCTV; Intruder Alarms; Integrated Security/ IP & Network Security; Public Security and Security Solutions.

Key exhibition features include the Intelligent Integration Zone and the international pavilions.

The Integration Zone returns to Ifsec 2011 following its successful introduction last year. Sponsored by Integrated Security Manufacturing Ltd (ISM), specialists in the manufacture and development of graphical security control management systems, the Intelligent Integration Zone is a must for any security professional responsible for handling the security of an organisation. ISM together with its six zone partners will be demonstrating how Genesys, its own integration software, integrates perimeter protection, video surveillance, digital CCTV recording, access control, intruder alarms and alarm/call strips.

In conjunction with the Ifsec exhibition, the Ifsec 2011 Security Industry Awards promise to be the key social event in the security industry calendar this year. The Awards acknowledge the people, products and technological advancements that have played a major part in the security industry over the past year. The winners will be announced at a black-tie gala dinner in the Hilton Birmingham Metropole on Monday 16 May 2011.

The international feel of Ifsec is compounded throughout the international pavilions where Spain and Belgium (returning for their second year at Ifsec) China, France, Italy, Korea, Taiwan and the USA will be showcasing a variety of the latest industry products and developments from across the globe.

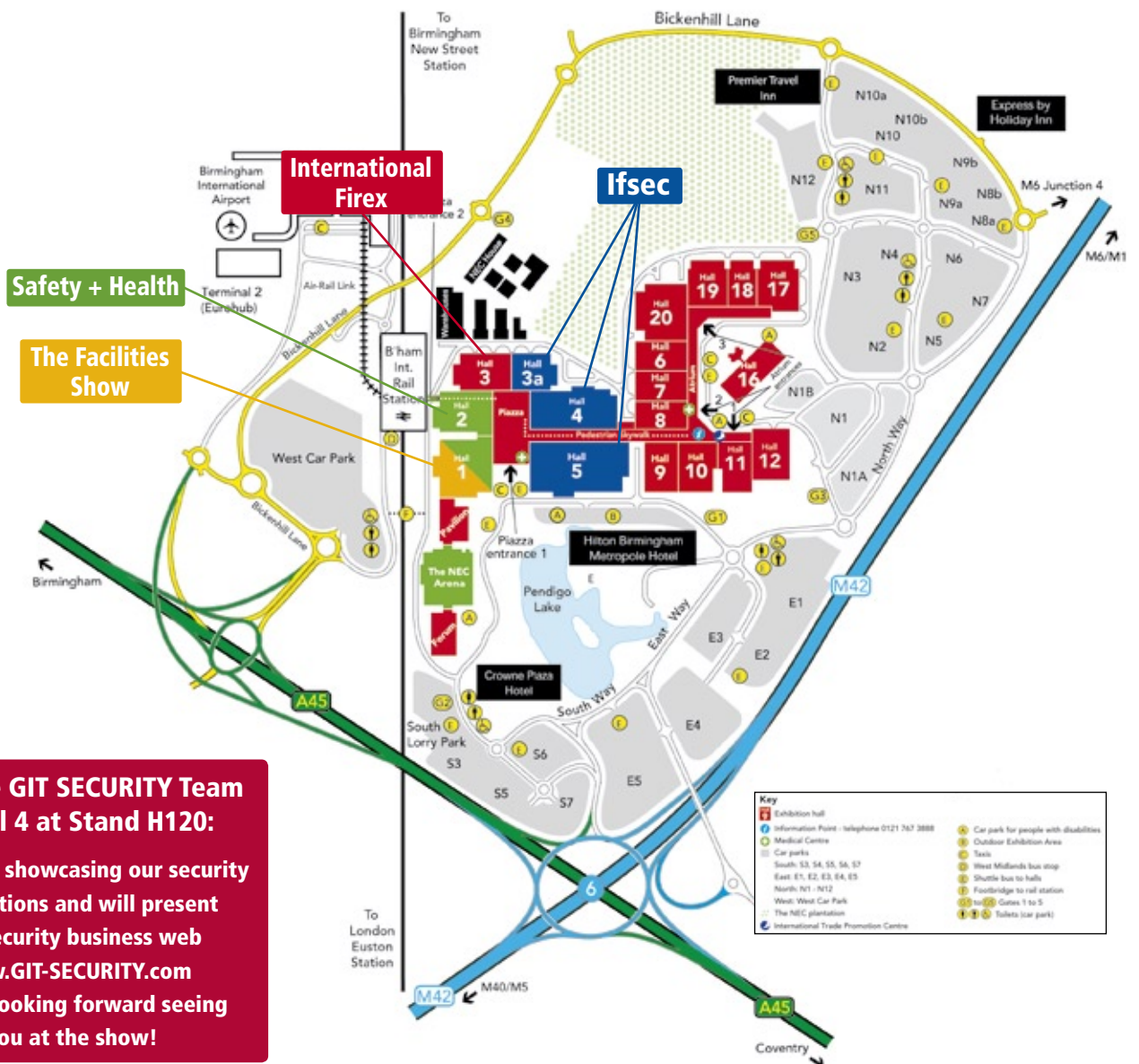
During the four days of Ifsec security apprentices will be showcasing their skills by taking part in the Engineers of Tomorrow – UK Apprentice Skills Challenge. Furthermore, new for 2011, The Future of Security Competition, run in association with Global Security Challenge, will aim to find the next generation security innovators.

International Firex

International Firex, one of the largest dedicated fire safety events in the world, will take place alongside Ifsec 2011 and are free to attend for all pre-registered visitors. Showcasing products and services from over 150 exhibitors, and featuring a full, free seminar programme on legislation, standards and best practice, it is a must for anyone involved in any aspect of fire safety. International Firex provides one of the few opportunities to actually see and compare such a wide range of fire safety products and solutions. It is also an ideal opportunity to network with experts from all aspects of fire safety.

ASFP Passive Fire Protection Zone

New for 2011 is a combined hospitality and free seminar area hosted by the Association of Specialist Fire Protection (ASFP). This brand new feature will focus on products, services and best practice on 'passive' or 'built-in' fire protection. With a strong emphasis on professional expertise and the requirements for approved installers and contractors, the Passive Protection Zone will



Visit the GIT SECURITY Team in Hall 4 at Stand H120:
 We will be showcasing our security publications and will present the security business web www.GIT-SECURITY.com
 We are looking forward seeing you at the show!

provide visitors with exclusive access to industry experts and knowledge on how to make their buildings intrinsically safe from fire, using the right materials and approaches to fire safety.

A key feature of the zone will be the Passive Protection Module, a specially-built construction graphically demonstrating the importance of correctly designed and installed fire protection in buildings. The passive protection zone includes also a theatre given over to a series of free seminars from specialists in the passive protection field. Each 20-minute presentation is designed to inform visitors about responsibilities with which they may be unfamiliar, and to offer practical solutions.

Safety & Health Expo 2011

Firmly established as Europe's leading annual event for the health and safety industry, Safety & Health Expo 2011 promises to be more innovative and informative than ever before. The show will welcome a wide variety of senior professionals looking to source new suppliers, network with colleagues and hear leading industry speakers discuss the most pressing issues of the day.

Packed full of the industry's leading manufacturers, distributors and suppliers showcasing their latest innovations, Safety & Health Expo is an important event for the industry. Here are the highlights of 2011:

- SHP Legal Arena sponsored by The HSE Recruitment Network: Legislation and regulation are the main drivers of health and safety in the UK and keeping up-to-date on developments is a vital part of the practitioner's role. Across the three days of the show, the SHP Legal Arena sponsored by The HSE Recruitment Network, visitors will receive advice on the most recent key legal developments, as well as analysis of some of the biggest cases and decisions in health and safety and related law.
- Occupational Health Theatre sponsored by Posturite: This brand new feature for 2011 will focus on health in the work place. The theatre will be focusing on topics such as stress management, ergonomics, behavioural safety, equality and diversity and other core topics which help promote a better quality of life in the work place.
- Product & Innovation Hub sponsored by Arco: At the Product & Innovation Hub sponsored by Arco, key organisations deliver vibrant, forward-thinking presentations. Over the three days visitors will have the opportunity to explore and interact with cutting edge products and technologies within the Hub, making this the ideal place to find new solutions to meet your needs.
- IOSH stand theatre: Taking place on the IOSH stand, the information presentations allow visitors to keep up-to-date with all the latest developments.
- Explosive Substances Live presented by Denios: You'll be aware of the many risks associated with handling flammable materials, however you may not realise that even the smallest quantities can prove deadly. Come and witness Denios' informative, lively and thoroughly entertaining experimental lecture. Using graphic demonstrations Denios highlighted what consequences can arise when flammable materials are incorrectly handled.

► CONTACT

UBM Information Ltd., Tonbridge, UK
Tel.: +44 1732 377532 · Fax: +44 1732 377803
www.ifsec.co.uk · www.safety-health-expo.co.uk



See it all.
All the time.



With our unified security platform

Imagine a world where one advanced platform, packed with powerful features, seamlessly manages all your security and safety systems.

We did. Now thousands of customers are reaping the benefits of our unified security platform worldwide.

See what you need at genetec.com

License Plate Recognition | Video Surveillance | Access Control

Visit us at IFSEC | May 16-19

National Exhibition Centre (NEC)
Booth 4-C30

Innovative Solutions

IFSEC

Welcome to Samsung City

To present a whole city, one needs space. Samsung's requirement for its largest ever booth at Ifsec to allow it to demonstrate its Samsung City concept, has necessitated a move to an entirely new position in Hall 5 the NEC.



Samsung's new SNP-5200 Network PTZ Dome Camera



The SNO-5080 is one of Samsung's new iPolis series Megapixel HD cameras

"Our new stand in hall 5 will be over 40% larger than last year's," said James Smith, European Marketing Manager for Samsung Techwin Europe Ltd. "This gives us the ideal platform to effectively demonstrate our full range of security solutions made up from our latest line up of IP & Network products and other technologies from our CCTV, Access Control, Door Entry and Intruder Detection portfolio. Many of these products incorporate technologies unique to Samsung. We therefore will be providing visitors to our stand with hands-on demonstrations on how they can best exploit these exciting and innovative technologies to achieve the best possible return on their investment in security over a wide range of applications, including transport, retail, public space, critical infrastructure and residential to name but a few."

Samsung City at Ifsec

"The concept for our stand will be Samsung City," added James. "Our overall objective at Ifsec 2011 will be to show how all our product ranges can work in harmony to provide a totally integrated solution. We have the ability to positively impact on people's lives, both at home and in the workplace by providing seamless and fully scalable se-

curity solutions which will not disrupt an individual or an organisation's day-to-day activities, but add real value to them. Samsung City (D130, Hall 5) will give us the opportunity to demonstrate the full extent of our capabilities and our understanding of what is important to customers."

Imagination, Innovation, Integration

What has been presented to over 200 security industry professionals at Samsung Techwin's Vision Conference in Malta on 2nd-4th March will now be showcased at Ifsec in Birmingham. The theme for the conference was Imagination, Innovation, Integration, and this was reflected in the presentations by senior managers at Samsung Techwin who provided an overview of what the company is going to achieve during the year and into the future.

As mentioned in the interview with Lucas Lee, the new managing director of Samsung Techwin Europe in GIT SECURITY 2/2011, Samsung will be rapidly expanding its iPOLiS IP network product range, including a new line of Full High Definition cameras and an enhanced range of network video recorders and will also give greater emphasis on its ability to offer fully integrated security solutions to match the varying

requirements of different market sectors. To this end, the company unveiled its innovative Total Security Management (TSM) platform which offers a fully scalable end-to-end Samsung solution for a host of applications from a single site solution up to a full city-wide management system. Benefiting from the latest network technology, TSM can combine a number of "packages", including surveillance, video servers, storage, network switches, intelligent video analytics, video walls and ANPR, to bring additional benefits to the captured video. An important part of TSM is that it can be cost effectively deployed in any environment from, for example, retail where the priority is the protection of stock through to the more demanding and sophisticated requirements of those involved in detecting and deterring far more serious threats to our security and safety.

Ifsec · Hall 5 · Stand D130

▶ CONTACT

Samsung Techwin Europe, Chertsey, UK
Tel.: +44 1932 455 308 · Fax: +44 1932 455 325
STSecurity@samsung.com

IFSEC

Net Profits

A Range of Network Cameras from Axis on Show at Ifsec

Easy to install and discreet, dome network cameras are being placed ever more frequently in stores, lobbies, museums, parking lots and banks. But the need for inconspicuous surveillance doesn't stop there and now small network cameras are also appearing outside. The next big opportunity to compare what is on the market will be the Ifsec show in Birmingham, UK from 16-19 May. Axis will also be there presenting their innovative range of indoor and outdoor cameras.

Looking more like a rate-of-rise fire detector than a camera, their M50 Series cameras are only 13cm (5") wide and less than half as high. They were conceived as mini PTZ cameras specifically for the small retail and office market. They are eminently affordable but still offer the operational flexibility of more expensive models. They are powered over Ethernet (PoE) and also incorporate a small microphone which can be used to detect unusual noises during closed hours and trigger a security alarm. This range is rated at IP51, meaning that they will continue to operate in dusty environments and are protected against dripping water. Different models provide various levels of resolution from SVGA to HDTV in 16:9 format.

Fitted with an 18x optical zoom, the P5522 dome cameras provide obvious video surveil-

lance and detailed images, both during the day in color and at night in black and white. With resolutions up to D1, they provide simultaneous dual streams in H.264 and/or Motion JPEG that are configured at different frame rates or resolution.

Out in the Cold

Moving outside, the P5522-E dome camera is rated at IP66 and NEMA 4X against rain, snow, sun and dust. Both this and the internal version use High Power over Ethernet and a midspan is supplied with the cameras. Installation is simplified by there being only one network cable necessary and a number of novel features will make this product particularly interesting for demanding situations.

The palm-sized M31-VE Series was developed for cost-conscious customers that need discreet surveillance of entrance areas or other ceiling-mounted locations. Outdoor versions operate happily down to -20 °C or up to +50 °C. Again PoE makes the cameras simple to install and the various models available deliver different resolutions according to requirements. These and other products of the Swedish manufacturer will be on show in Hall 4 on stand 4/E90 at Ifsec.

Ifsec · Hall 4 · Stand E90

▶ CONTACT

Axis Communications AB, Lund, Sweden
Tel.: +46 46 272 1800 · Fax: +46 46 13 61 30
www.axis.com



VISUAL DISPLAY SOLUTIONS FOR COMMAND & CONTROL - MADE IN GERMANY

Professional Narrow Bezel LCD Screens for Video Walls

) EYE-LCD4600-SN – The Original Proven Design

46" Diagonal / 1366 x 768 Pixel / Active-to-Active: 7.3 mm

) EYE-LCD5500-USN-LHD – New Version with LED Backlight

55" Diagonal / 1920 x 1080 Pixel / Active-to-Active: 5.7 mm

) EYE-LCD6000-SN – New Version with LED Backlight

60" Diagonal / 1366 x 768 Pixel / Active-to-Active: 6.5 mm

... and many more products for sophisticated control room applications: DLP® cubes, graphic controllers, wall management software and accessories.

) **eyevis GmbH**, Hundsschleestr. 23, 72766 Reutlingen/Germany
Tel.: +49 (0) 7121 43303-0, Fax: +49 (0) 7121 43303-22, www.eyevis.com, info@eyevis.de



IFSEC2011 Hall 4
16 - 19 May 2010
Stand D145

eyevis
PERFECT VISUAL SOLUTIONS

IFSEC

Scalable, Efficient, Flexible, Reliable...

At Ifsec 2011, Genetec will be showcasing its new products and features. Below is a snapshot of what you can expect to see at the show.

Security Center 5.0 is the latest version of Genetec's unified security platform. Version 5.0 comes with a next-generation video engine, built-in failover, video buffering at the client workstation, additional playback speeds, and intrusion panel integration. Version 5.0 also offers a single software development kit (SDK) for video, access and license plate recognition, a new web SDK, and more.

Security Center Mobile is a new feature that allows organizations to equip their security personnel with RIM BlackBerry and



PTZ cameras can be controlled by operators in the field through presets with Security Center Mobile.



Weighing only 13 ounces, the SV-16 is one of the smallest network security appliances on the market.

Apple devices so they can connect back to their Security Center unified platform over any wireless network. The Security Center Mobile feature has been designed to support multi-touch gestures such as swipes and pinches on all the latest mobile devices, ensuring that information is easily accessible and manipulated by users.

Plan Manager is the interactive map feature that allows operators to efficiently manage their security environment by creating and integrating interactive maps into their video surveillance system. Users can instantly access and manipulate various graphical entities on a map such as hot spots (pre-defined high-security zones), map links (links to different points between floor plans or within the same floor plan), favorite views, cameras and other solutions.

SV-16 is the network security appliance powered by Genetec's video surveillance software, Omnicast. This compact-sized appliance is perfect for small-scale installations under 16 cameras and for multi-site installations with small remote locations. The SV-16 is compatible with both IP and analog cameras with the use of video encoders. Thanks to Omnicast's open architecture, the SV-16 allows customers to choose hardware that best suits their needs.

Ifsec · Hall 4 · Stand C30

CONTACT

Genetec Inc. Saint-Laurent, Canada
 Tel.: +1 514 332 4000
 Fax: +1 514 332 1692
 info@genetec.com
 www.genetec.com



INNOVATION MOVES ON...

IFSEC IS EUROPE'S FIRST OPPORTUNITY TO SEE NEW SECURITY PRODUCTS BROUGHT TO LIFE

ACCESS CONTROL | CCTV | INTRUDER ALARMS | IP/NETWORK SECURITY
 PUBLIC SECURITY | SECURITY SOLUTIONS

THE INTERNATIONAL SECURITY EVENT
 IFSEC is part of the Protection & Management Series, uniting security with fire, safety and facilities management professionals.

REGISTER FOR FREE ENTRY AT
WWW.IFSEC.CO.UK
 REGISTRATION CODE
GSM



IFSEC 2011
 16-19 May 2011
 NEC Birmingham, UK

SUPPORTED BY






CERTIFIED BY



OFFICIAL MEDIA PARTNER



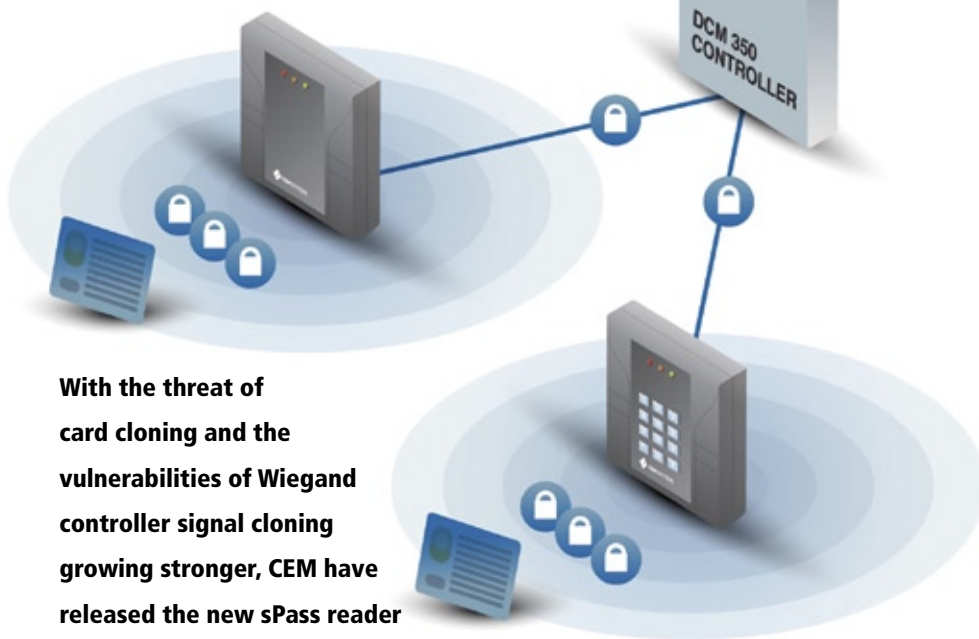
ORGANISED BY



IFSEC

Measures against Card Cloning

End to End Security with CEM Systems



With the threat of card cloning and the vulnerabilities of Wiegand controller signal cloning growing stronger, CEM have released the new sPass reader and DCM 350 two-door controller with secure RS485 encrypted communications to combat these threats and vulnerabilities.

CEM sPass reader is a contactless smart card reader with powerful 3DES (Triple DES) encryption. Available as a keypad or non-keypad option, the sPass reader connects to the new DCM 350 intelligent two-door controller, which utilises highly encrypted RS485 communications to the sPass reader. The DCM 350 can be configured to support two sPass readers on two separate doors with optional Exit push buttons, or can be configured to support two sPass readers on a single door for Entry/Exit control.

CEM has also introduced a new contactless 13.56 MHz DESFire smart card to eliminate the threat of card cloning. Each card has different sets of encrypted keys that are securely stored on the card for high levels of security. CEM pre-personalises the card memory for customer convenience and cost efficiency. The CEM DESFire smart card can hold up to 28 different security applications such as access control and cashless vending, and 32 files per application.

Combined as one highly secure DESFire controller solution, the CEM eDCM 350 two-door controller, sPass DESFire reader & smart-card will offer the security market a low cost, yet highly secure option. Customers will have multiple layers of security from start to end.



Learn more about sPass at Ifsec

CEM Systems Hardware Engineering Manager, Ian Schofield will be presenting 'Measures against card cloning' at Ifsec on Tuesday 17th May at 12 noon in Theatre 2 at Ifsec.

Ifsec: CEM Systems at Tyco Stand D10/ E10 · Hall 5

▶ CONTACT

CEM Systems Ltd., Belfast, UK
 Tel.: +44 28 90456767 · Fax: +44 28 90454535
 cem.info@tycoint.com · www.cemsys.com

PHYSICAL SECURITY INFORMATION MANAGEMENT



IFSEC

Designed to Make IP Simple

Panasonic Showcase Developments in Security Solutions at Ifsec 2011



At Ifsec 2011, the world's leading annual security event, over 25,000 security professionals can visit stand C10 in the NEC's Hall 5 to see the developments in Panasonic's well-established security solutions. Showcasing additions to the award-winning i-Pro SmartHD range, developments in identification software and innovation in video capture concepts, PSNE's solutions for all security applications is driving market innovation for 2011.

Visitors to the stand can see the range of security cameras, encoders and network recorders that puts the award winning i-Pro SmartHD range at the forefront of IP security solutions one year since its launch at last years Ifsec show. Developments in intelligent functionality and growth of the i-Pro SmartHD range means this year's value-added security solutions balance the best HD image quality with H.264 encoding to minimise network data traffic.

Smart NVR Solutions and Face Matching Technology

The new WJ-NV200, i-Pro SmartHD compatible, 16 channel network disk recorder eliminates the need for a PC, reducing the total cost of ownership and removing time and complication from operation. The effortless, 'analogue-like' 4-stage set up and intuitive operation makes the WJ-NV200 versatile for a range of public locations and makes IP simple.

Ifsec will also demonstrate real time face matching technology in the latest i-Pro SmartHD range, optimising suspect identification and allowing facial image registration for 16 individuals and facial recognition of up to 8. Face matching essentially becomes like another set of eyes monitoring cameras, freeing up more time for security personnel to perform other tasks; helping to create a more efficient security operation.

A Future Option: 3D

PSNE will also conceptualise innovations in 3D security at the stand presenting the potential for video monitoring one step closer to human vision. Stephen Gerrard, UK Country Marketing Manager, PSNE stated: "PSNE are presenting 3D concepts as a future possibility for security. While

Panasonic's WJ-NV200, i-Pro SmartHD compatible, 16 channel network disk recorder

we appreciate that it's not necessarily a viable security application in today's market place, part of Ifsec is the promotion or exploration of new concepts for the security industry. Panasonic being a global AV leader means we are constantly innovating and exploring new directions for our technology in all sectors."

As the momentum in IP security builds, PSNE also builds and diversifies its range of security equipment. Ifsec 2011 gives delegates a chance to see the hardware and software solutions that cater for an evolving market. While continuing to improve analogue security products, Panasonic's IP and Hybrid solutions are designed to make IP simple.

Ifsec · Hall 5 · Stand C10

▶ CONTACT

Panasonic UK Ltd., Bracknell, UK
Tel.: +44 1344 862444 · Fax: +44 1344 853081
cctv.sales@panasonic.co.uk
www.panasonic.co.uk

Mobile ID

Morpho (Safran group) announced the launch of Morpho Ident, the latest handheld mobile device in its line of criminal justice solutions. Designed for public safety agents and officers in the field, it enables real-time, on-the-spot identification based on fingerprint recognition technology. It is a robust, pocket-sized device using state-of-the-art identification technologies. It offers user-friendly features such as intuitive pictograms, folder management, vibration alert and an easy-to-use keypad. Fingerprints are captured with an FBI certified optical PIV sensor, including real-time automated quality check, and matched against local, national or international databases. Results are displayed on the device's large color LCD screen, giving officers fast access to critical crime solving information. The device can be easily integrated into existing IT architecture without incurring additional infrastructure costs. nathalie.jullien@morpho.com

Ifsec · Hall 4 · Stand D110

Day/Night IP Cameras and Motion Detectors

One of Bosch's highlights at IFSEC will be the Dinion HD and FlexiDome HD 720p Day/Night IP cameras equipped with Bosch's latest 1/3-inch HD CCD with progressive scan. The cameras deliver sharp, highly detailed HD images combined with renowned Dinion performance. Pixel-by-pixel image processing generates the most detailed images, making it easier for operators to distinguish small features – important when trying to recognize facial characteristics, identify small objects or make out items such as number plates. Also, being true HD, images are reproduced in widescreen format which captures more usable content from any scene. Fully Open Network Video Interface Forum (ONVIF) conformant, the Dinion HD and FlexiDome HD cameras integrate easily with third-party security solutions. Intuitive software also allows them to be combined with standard definition appliances in the same system, with seamless operation.



The Blue Line Gen 2 Motion Detectors from Bosch provides improved catch performance, enhanced false alarm immunity and easier installation for technicians. Available in standard and pet-friendly models, the new series is suitable for residential, retail and other commercial security applications. The new Detectors include the passive infrared (PIR), the Quad PIR detectors and the TriTech detectors that combine PIR and microwave technologies for more advanced analysis. All models use an interchangeable mounting base, enabling easy upgrades to more advanced detection technology in areas prone to false alarms. In addition, pet-friendly models can be set to "No Pet" to allow customers to use the same product in multiple applications, reducing inventory for security dealers. A host of additional features provide reliable performance for customers. The sealed optical chamber prevents drafts and insects from affecting the detector, and pet immunity distinguishes between signals caused by humans and animals. Dynamic temperature compensation also adjusts sensitivity to accurately identify intruders regardless of room conditions. www.bosch.com

Ifsec · Hall 5 · Stand D90

IP Dome Cameras with Audio Functionality

Basler's new IP Fixed Dome Camera models are equipped with a two-way audio function and with a new multimedia video processor. They will be exhibited at the upcoming Ifsec show. With the integration of audio functionality, both a microphone for audio recording and speakers as part of a public address system can be connected to the camera. When this feature is used, the IP Fixed Dome Cameras cover an even wider area of surveillance than the camera's field of view. The two upcoming dome camera models, the BIP2-D1000c-dn camera and the BIP2-D1300c-dn high definition model with a resolution of 1.3 megapixels, provide real-time video at frame rates of up to 30 fps with MJPEG, MPEG-4, and H.264 compression. In addition, the IP Fixed Dome Cameras offer a choice of two different H.264 compression profiles, one of which is the High Profile (up to level 5) – the same standard used in Blu-ray technology. bc.sales.europe@baslerweb.com

Ifsec · Hall 4 · Stand E104

Interactive HD Training

The theme for this year's Sanyo stand at Ifsec is 'Education, Education and yet more Education.' The manufacturer wants to ensure the pace at



which Full HD camera technology is utilized by end-users is not affected by the lack of training by all who are involved in the sales channel. It has therefore introduced, and will be demonstrating at the trade fair, an interactive Full HD technology training programme. This comprises a number of modules tailored to cater for the specific requirements of end-users, consultants, installers/system integrators and distributors. Each module comprehensively covers how to design, install and commission a surveillance system based around Full HD camera technology. "We had a record number of people visit our stand at Ifsec 2010 who were keen to learn more about our Full HD camera range and we are confident that our stand will be equally as busy this year," said David Hammond, European Sales Manager for the company's CCTV division. cctv@sanyo.co.uk

Ifsec · Hall 5 · Stand C70

Megapixel Lenses

Fujinon's Highlights at the Ifsec trade fair will be a number of megapixel Varifocal lenses for day/night as well as new high-resolution telezoom lenses for long range surveillance applications in High Definition. A new 2-megapixel Telezoom lens will be introduced: The HC16x100R2CE-F11 is the latest high-end model to the manufacturer's CCTV mega pixel product range. This lens features the same optical and mechanical quality similar to Fujinon HD broadcast lenses. The HC16x100 is designed for light sensitive cameras with sensors sizes up to 1". The focal length of 100 to 1600 mm can be doubled by a built-in two times extender to a maximum focal length of 3,200 mm. Despite the long focal length the HC16x100 features a fast F-stop of 3.4. The lens is equipped with the company's "Day&Night technology" which allows the use of IR illumination. This combination of an extreme long focal length with the high-end optical quality makes the HC16x100 the perfect choice for high-quality long-range surveillance applications. cctv@fujinon.de



Ifsec · Hall 5 · Stand E25

Very Small HDTV PTZ-Cameras

Axis Communications presents ceiling mount pan/tilt/zoom dome cameras that, according to the Company, are the worlds smallest of their kind. Axis M50 PTZ Dome Network Camera Series offers business managers a discreet and affordable solution for remotely monitoring indoor areas, such as stores, banks, hotels, office lobbies, restaurants and warehouses, to more effectively manage one or more locations and improve security. With a sleek and compact design, the cameras are only 13 cm (5.1") wide and 5.6 cm (2.2") high, enabling discreet, high-quality 360° surveillance in HDTV. A built-in microphone also allows managers to use the audio detection function to monitor for unusual noises during off-hours to trigger a security alarm. "Axis M50 cameras are affordably priced mini PTZ domes that give the big picture," says Erik Frännlid, Director of Product Management. The series "brings the flexibility and benefits of a pan/tilt/zoom camera, and Axis' design and quality hallmarks, down to a price level that is now affordable for many small retailers and offices." www.axis.com



Ifsec · Hall 4 · Stand E90 and E140

Panoramic Views

Arecont Vision introduces a new generation of Surround-Video Day/Night 8-megapixel H.264 cameras providing 180-degree or 360-degree panoramic views. Models AV8185DN and AV8365DN are solutions for applications where mechanical pan-tilt-zoom (PTZ) devices might otherwise be used or where multiple cameras would be needed to view expansive coverage areas. Each new camera incorporates surface-mount and in-ceiling mounting options, as well as an IP66-rated environmental chassis and 5.5-inch polycarbonate dome, eliminating the need for an external housing. Model AV8185DN provides a 180-degree panoramic view, using four 2-megapixel sensors that can be switched between day and night manually or automatically. The AV8365DN panoramic camera provides a 360-degree day/night panoramic view, using four 2-megapixel sensors for a total image of 6,400 x 1,200 pixels at 22 frames-per-second (fps).

www.arecontvision.com

Ifsec · Hall 5 · Stand D50



Weatherproof Bullet Camera

The Samsung SCO-2370 37x zoom weatherproof 'all-in-one' bullet camera is supplied complete with a housing, bracket, heater, fan and sunshield, as well as 1m of pre-made cable, enabling installers to save both time and money on installation and commissioning. The bullet camera utilizes the manufacturer's W-V DSP chipset to capture high quality color images at 600 TV lines during the day and 700 TV lines monochrome images at night. Petrol station forecourts, schools, retail outlets and commercial buildings are e.g. environments that could benefit from the 37x optical zoom and true day/night camera capabilities, and with a weatherproof rating of IP68 the camera is also at home in more demanding external environments that are prone to severe weather conditions, such as sea ports. Other built-in features include eight motion detection zones, twelve privacy masking zones and the company's Super Noise Reduction (SSNRIII) technology.

STSecurity@samsung.com

Ifsec · Hall 5 · Stand D130



Video Content Analysis and Management

Videotec announced the integration of their Albert device for Video Content Analysis with the Milestone X-Protect IP Video Management platform. Albert is a new concept in CCTV Systems, merging Intelligent Video Analytics with operational ease and providing optimal viewing to operators and recording systems. The manufacturer has patented the cooperation between cameras providing high quality recording and viewing facilities in one system. The built-in fault-tolerance and redundancy make it adequate for mission critical outdoor applications, where multiple events can occur simultaneously and where operators are required to control a large number of cameras including PTZ models. Installation and operational costs of video analytics solutions are therefore minimized. The device's architecture creates an Intelligent Security Network that actively aids guards in prompt decision-making in video surveillance tasks.

info@videotec.com

Ifsec · Hall 5 · Stand C60



Pre-loaded

Milestone Systems is expanding its product line-up with a pre-loaded and easy-to-configure solution called X-Protect Essential NVR. Powered by the HP Z200 Workstation, the solution delivers the company's X-Protect Essential video management software preinstalled. It is designed for the small business market, providing fast setup and ease-of-use. The cost and time of setting up the entire installation is minimal since the software is pre-loaded with all of the storage and technical IT configurations required. All that is left to do is camera configuration – the built-in wizards swiftly guide through the process. The NVR is very user friendly with a consolidated single-management interface and search tools that make the daily operations of video surveillance easy. The HP Z200 Workstation comes pre-loaded with Microsoft Windows 7 Professional and Milestone X-Protect Essential VMS, ready to operate with 8 or 16 video channels and up to five concurrent users.

www.milestonesys.com

Ifsec · Hall 4 · Stand F90



Flexible Access

The latest release 5.3.7 of Seetec's video management software is available. It provides additional features for an even more flexible system access. Furthermore, additional hardware devices from several manufacturers as well as further hardware features are supported. The company's Web-Client, which is available with the new release, can be used for a swift remote clarification of alarms or suspicious cases. Its live view gives the user an overview of the current situation on site. The archive view can be used to view e.g. alarm recordings. Users can simultaneously access one or several installations over the internet without prior software installation. The application is browser independent and does not require any additional video plugins or codecs to be installed as all video source formats are automatically converted to Motion JPEG by the producer's Transcoding-Engine.

info@seetec.de

Ifsec · Hall 4 · Stand D145



Dome HD Series Expanded

Bosch Security Systems has expanded its Autodome Junior HD series with a fixed camera model. It provides the same 1,080p or 720p resolutions, 10x optical zoom and compact design as the rest of the series, making it suited for indoor applications where both highly-detailed imaging and aesthetics are important. Banking, retail, casino, and government or commercial building applications can benefit from the camera's crisp, clear images that make it easier to identify people or small objects, such as jewelry. HD video also delivers increased situational awareness with a 16:9 aspect ratio that maximizes the field of view without compromising image details. Quad streaming provides simultaneous streaming of high-quality video with differing frame rate and resolution settings for flexibility in system design. For example, customers can select 1080p or 720p HD video for recording with H.264 compression, while simultaneously sending JPEG images to a hand-held device. The camera also offers built-in Intelligent Video Analysis (IVA) software to automatically process video signals and alert operators to potential security risks.

www.bosch.com

Ifsec · Hall 5 · Stand D90



DVS 1600

Intelligent Video Analysis

Since 2001



SEDOR® Technology
inside

All-in-One: video analysis + recording + transmission



See you at Ifsec in Birmingham:
hall 4, stand D8o

- Automatic alarm messages and efficient research for events
- Analysis, recording, transmission and research in one system
- Optimized for professional permanent operation 24/7
- Low false alarm rate due to comprehensive validation mechanisms
- Easy configuration and maintenance thanks to integrated wizard

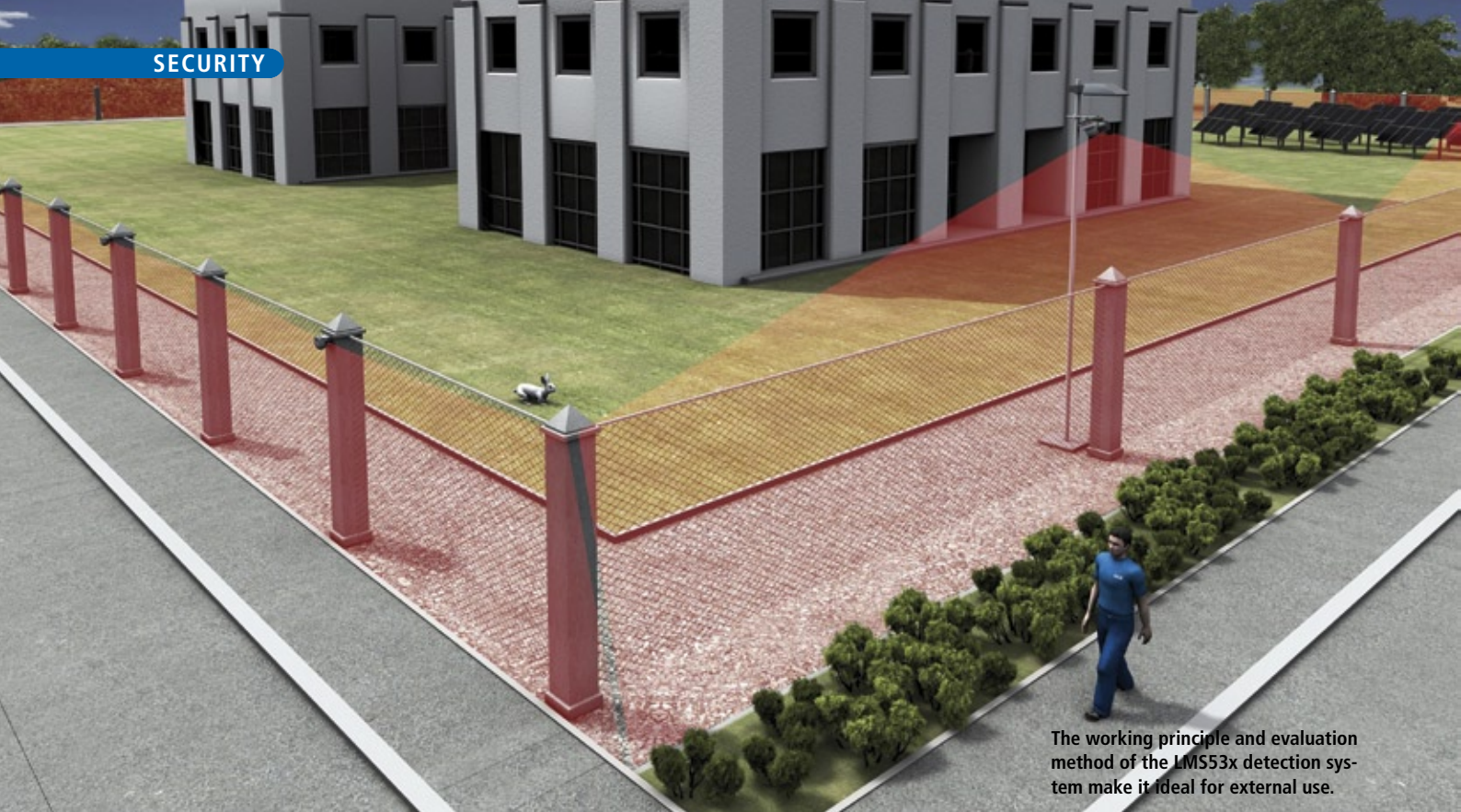


banks, office buildings, shopping malls, retail, airports, restaurants, ports, hotels, industry, prisons, power plants, hospitals, logistics, military, mining, museums, public places, package tracking, parking, police, refineries, government, schools, casinos, stadiums, city surveillance, petrol stations, tourism, tunnels, universities, shopping malls, retail, airports, restaurants, ports, hotels, industry,...

Dallmeier electronic UK Ltd
Phone: +44 (0) 117 3039303
dallmeieruk@dallmeier.com
www.dallmeier.com



Dallmeier



The working principle and evaluation method of the LMS53x detection system make it ideal for external use.

COVER STORY

Cutting-Edge Laser Technology

Safe and Reliable Monitoring of Open Terrain

Open terrain monitoring systems are designed to reliably preclude false alarms when there is no intruder and to notify system failures if they occur.

Matthias Mezger, Marketing & Sales Manager for Building Automation/Security at SICK explains more about this not so commonly applied detection technology.



Matthias Mezger,
Marketing & Sales
Manager, Building Auto-
mation/Security, SICK AG

Conceived against the background of the revised EN 50131 standard, the LMS53x laser measurement system has a robust design, fine resolution and multi-echo evaluation system that is immune to interference. Its capabilities transcend the suitability limitations of numerous electronic and electromechanical detectors and it forms an innovative detection solution. Detection at long ranges even of darkly-clad figures, refined measurement methods independent of weather influences, flexibly programmable evaluation strategies together with relay outputs for direct alarm activation all enable this security sensor to be integrated perfectly into monitoring concepts for open terrain and into anti-intruder alarm systems. The first ever use of multi-echo technology in this application makes these sensors particularly suitable for outdoor use.

Early Detection

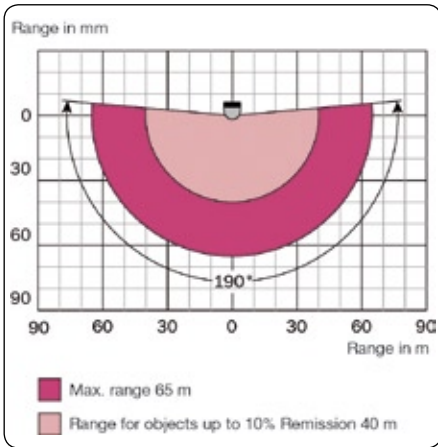
Early warnings and prevention of damage are the most important benefits such systems provide when monitoring open terrain. Designed by specialist firms belonging to organizations such as the BHE (German Association of Security System Manufacturers and Installers), the security factor of these systems is high enough that, following an alarm signal, sufficient response time remains for intervention measures to be taken to prevent possible damage by intruders. Current

technical protection measures are firstly derived from an initial security analysis of the protection target i.e. anticipated threats, possible offender profiles and the required barrier effect or resistance class, from which the first considerations are made about possible detectors or the physical operational methods for generating appropriate alarms.

Special Requirements

Secondly, with open terrain monitoring systems, extra attention needs to be paid to usage conditions and environmental factors. Conventional detection systems will reach their various limitations of usage and suitability depending on their physical principle. This means that certain events, such as when a ladder is used to overcome a mechanical barrier, may be detected only poorly or not at all. In addition, prevailing and potential conditions such as the influence of temperature, times of day, weather conditions, vegetation or roaming animals at the location need to be taken into account.

If this is not done, there is a heightened risk that alarms will fail to conform to the specified requirements. These false alarms - defined in DIN VDE 0833-1 as „Alarms for which there is no foundation of danger“ – may cause needless, costly deployment of an external security service. Alarm failures are equally undesirable. These



The LMS53x enables radial detection of intruders at distances up to 65 meters.

occur when there is an attempt to overcome a mechanical barrier or monitoring system which is not detected, so that consequently no alarm is sounded. Both situations can be avoided with the Sick laser measurement system, which uses a method that would otherwise require several active detection systems using different operating principles.

Bad News for Burglars

The LMS53x is a 2D laser measurement system, which has been specially developed for long-range security applications in outdoor areas. Early detection is of particular importance for protection of boundaries in any holistic security concept. The sensor can be used to monitor horizontal areas such as courtyards, driveways or roofs or vertical planes such as walls, fences or facades. It meets the requirements of Environment Class IV in EN 50131 (VDE0830) as per EN 50130-5 testing methods, meaning it can be installed to monitor open terrain in areas fully exposed to the elements. It is equally suitable for monitoring indoors under harsh environmental conditions such as water vapor or dust. Appropriate protection systems are also available for situations where the system is needed to be protected against the heat effects of direct sunlight, against falling rain or splashing water.

The system is modular and comprises three components: a sensor head with sender/receiver



The long range and weather immunity allow the LMS53x to be integrated into open terrain and anti-intruder monitoring systems.

optics and data evaluation, a plug-in security application module with individually adjustable settings and parameters plus a plug-in unit with an integrated parameter memory that enables devices to be replaced or connected simply and quickly. Its light-intensive sender optics enable radial detection of intruders at large distances up to 65 meters, typical for open terrain. When positioned accordingly, ranges within a detection diameter of up to 130 meters are obtainable with 10% object reflectivity.

Scanners can even detect darkly-clad figures in dark neoprene suits with extremely weak reflectivity at up to 40 meters. Angle resolution is adjustable between 1° and 0.167° , meaning the laser measurement system provides optimal accuracy for virtually all open terrain monitoring applications. The LMS53x system has low maintenance requirements and a self-monitoring option, which can be activated or deactivated by the user, as well as user-specified servicing cycles.

Multi-Echo Technology

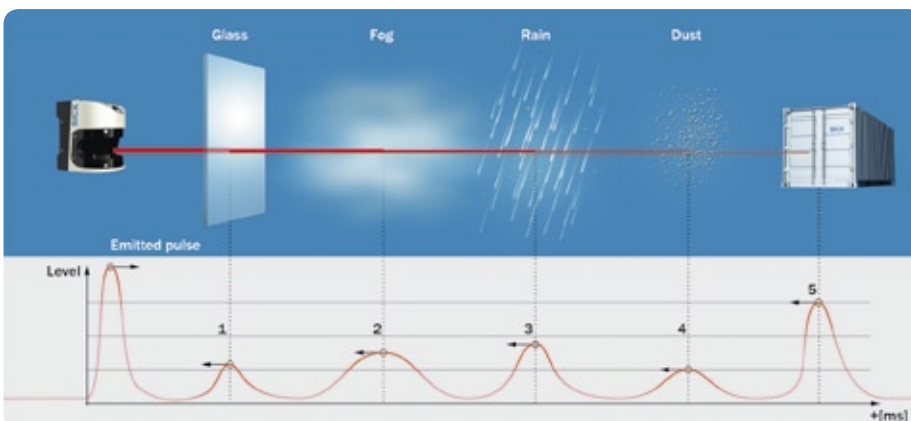
High-speed sampling is capable of evaluating up to five return echoes of a transmitted pulse at scanning speeds of up to 100Hz and is a key benefit for enhanced performance in security applications. This multi-echo technology generates optimum measuring data for more precise detection. Scanning is also immune to weather

and ambient conditions to a hitherto unattained extent due to the additional measuring data for each angular beam. Specifically adapted software filter algorithms ensure efficient suppression of near pulses for reliable detection of fixed-position or moving objects in poor visibility during rain, in fog or dust throughout its 190° scanning angle.

Limitation Compensation

Laser-based detection is very well suited for a large number of security applications in outdoor areas since its working principle and evaluation method are appropriate for virtually all object-specific ambient conditions. It offers the optimal conditions for minimizing the number of unwanted signals – for example due to weather conditions – and false alarms due to animals roaming in the monitored area. This means less call-outs due to false alarms, a faster return-on-investment and better acceptance with security authorities and their operating personnel.

The device is also ideal as a supplementary or verification system for physically differing detection methods, such as thermal imaging cameras, video technology, motion detection, radar and field change sensors, ground detection and fence alarm systems as well as for electromechanical detector solutions. The LMS53x provides reliable and economic monitoring of open terrain, whether used as a stand-alone device or as part of a network. Use of the sensor is already planned by well-known installers in their current projects, for instance in the outdoor protection of a European state central bank.



Multi-echo technology enables greater detection precision and immunity to weather and ambient conditions.

► CONTACT

SICK Vertriebs GmbH, Düsseldorf, Germany
Tel.: +49 211 5301 301
kundenservice@sick.de · www.sick.de

PERIMETER PROTECTION

The Right Chemistry

Thermal Imaging Cameras Secure the Perimeter of Industriepark Höchst



With its state of the art technical infrastructure, perfect access to international transit routes and its proximity to key suppliers and financial markets, it is no wonder that many of the world's leading chemical and pharmaceutical companies have set up facilities in Industriepark Höchst, near Frankfurt. The industrial park facilitates more than 90 companies within an area of over four square kilometers.

Within the premises of Industriepark Höchst there are over 800 rental properties, 120 production plants and over 80 laboratory and office buildings that accommodate the in total 22,000 employees that work there. The compound stretches over 460 hectares of which 50 are still available for relocating or expanding companies. There are three means of transportation in and out of the park: by car, by train and by boat.

Security: A Major Priority

Given the importance and in some cases sensitivity of the chemical and pharmaceutical pro-

duction facilities and related process industries located at Industriepark Höchst, security is a major priority. Securing such a large area with so many access paths isn't an easy task. As the service company of the industrial park it is Infraserp Höchst that has the responsibility to make sure the park is safe and secure.

Infraserp supplies the companies that inhabit the industrial park with energy, disposes of waste, and provides access to business space and infrastructure. Its service portfolio ranges from environmental, security and safety services all the way to health products, communications and IT. To be able

To protect the perimeter of the industrial park, Infraserp Höchst uses thermal imaging cameras from FLIR.



The thermal imaging cameras from the FLIR SR-Series provide perfect nighttime vision, even in complete darkness.

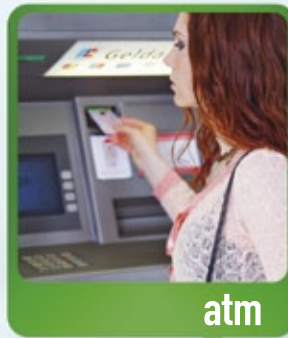
to effectively secure the entire perimeter of this large industrial complex, even during the night, Infraserp uses thermal imaging cameras from FLIR.

"We have installed security cameras of several different types to cover the entire perimeter of the industrial park, including several thermal imaging cameras", explains Thomas Krüger, head of the control center at Infraserp. "The thermal imaging cameras we use are the FLIR SR-313, with a 35 mm lens and the FLIR SR-324 with a 19 mm lens. We chose these cameras

Intelligent Video Surveillance for Highest Standards!

Modular Video Management Platform with Unlimited Scalability and System Integration

Axxon Intellect Enterprise



because they were an effective and affordable solution for the challenges that we had to face with securing this dynamic industrial park."

Perfect Night Vision

Thermal imaging cameras provide perfect night vision in even the darkest of nights. Intruders show up very clearly in a crisp thermal image due to the contrast in temperature between a person and his surroundings. But that's not all; thermal imaging cameras can also see through obscurants like smoke, dust, foliage and fog better than a CCTV camera. Krüger is very happy with his FLIR thermal imaging cameras. "Sometimes I wish that I had this technology at my disposal when we started installing our security network. I probably would have installed many more thermal imaging cameras than we have now, for in most situations they're much better than CCTV cameras." Krüger purchased the FLIR thermal imaging cameras from FLIR products distributor VIDEOR. As one of the leading European distributors of professional video technology VIDEOR has a market experience of over thirty years. The wide product range of the near Frankfurt based company covers components and integrated systems in the security, networking, imaging and broadcast sectors, based on strict quality standards.

Bird's Eye View

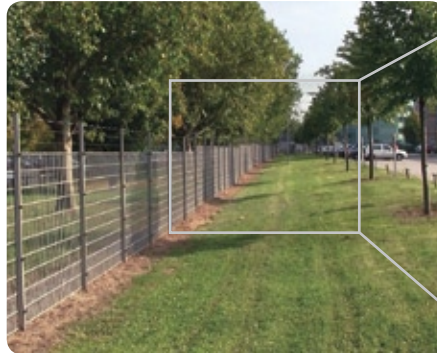
Due to his positive experience with thermal imaging, Krüger is now contemplating to install a new thermal imaging camera in a high location. The best solution for such a location is probably the FLIR PTZ-35x140 MS thermal imaging camera. With its two thermal imaging cameras and one low light camera it provides perfect vision, even in total darkness. The two thermal imaging cameras provide a continuous optical zoom, with a wide angle thermal imager for situational awareness and a narrow field-of-view imager that has been designed for mid-range target recognition. If Krüger would choose to opt for the FLIR PTZ-35x140 MS, it would be able to utilize its long range performance to its full potential from its high vantage point and with its full 360° viewing capability it would be able to observe the entire park. "That would be quite useful", explains Krüger. "Not only could we use that to spot intruders, we could also put it to good use in case of fire or spillage, monitoring and directing the firefighting or salvage operation."

No Lights Needed

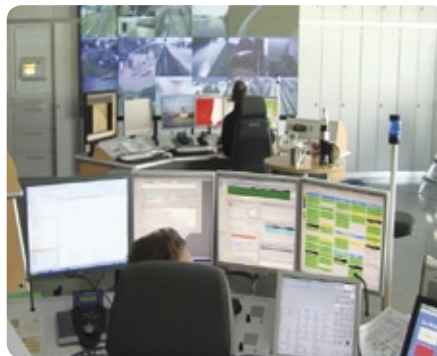
The thermal imaging cameras that are already operational have proved their use. "We've put them in locations where it's difficult for CCTV cameras to be effective", explains Krüger. "In certain areas it is difficult due to the infrastructure to put up proper lighting, for instance. With a thermal imaging camera you don't need lights." Thermal imaging cameras are incredibly useful to see at night, but according to Krüger



The FLIR SR 324 thermal imaging camera covers this entire fence.



In a similar situation nearby, four CCTV cameras are needed to cover an area of the same size.



From this control room Krüger and his team monitor all the CCTV cameras and the thermal imaging cameras from FLIR.

FLIR SR-Series

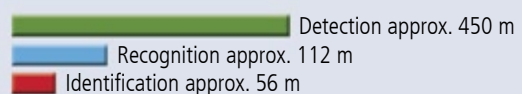
Thermal imaging security cameras from the SR-Series are extremely affordable and offer perfect nighttime vision in even the darkest of nights. They are easy to use and easy to install and they have excellent range performances.



Detection, Recognition, Identification of Human Target

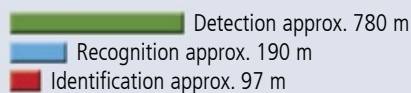
SR-324

- 19 mm lens
- FOV 24° (h) x 19° (v)



SR-313

- 35 mm lens
- FOV 13° (h) x 10° (v)



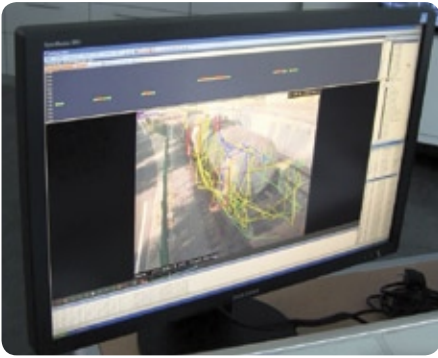
a winning combination



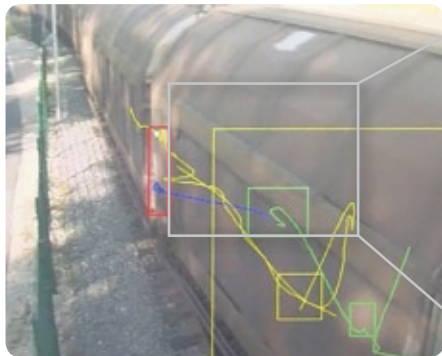
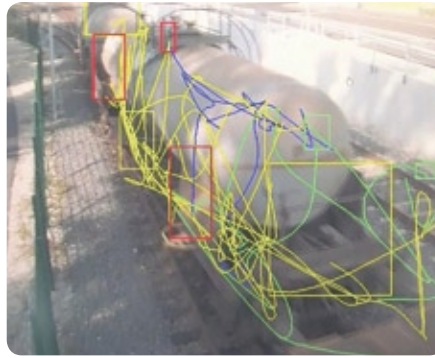
Protecting what matters most with Honeywell integrated security solutions

In a world that faces an ever-increasing combination of threats—where security solutions are growing more complex, you need a strong and trusted partner. As a leader in every area of security—intrusion, access control and video surveillance—Honeywell and its scalable, integrated solutions secure millions of premises around the world, including homes, businesses, cultural sites, industry and critical infrastructure. If you take great technology and put it together with the best, most experienced people, it's a winning combination—and the reason so many of the world's leading security installers, integrators and end-users have chosen Honeywell as their partner of choice. Visit www.honeywell.com/security/emea to find the right security solution for you.

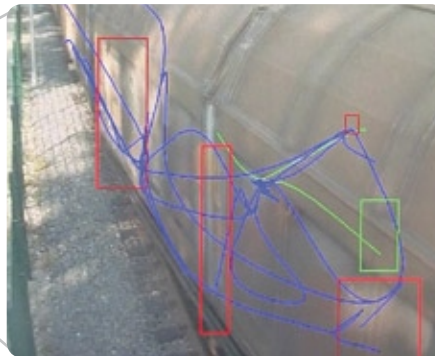
Honeywell



Infraserv uses advanced video analysis software (Aimetis Symphony) to pick up unauthorized movement.



The red brackets indicate an alarm, an unwanted alarm in this case, triggered by graffiti on the side of the train. With a thermal imaging camera this would not have triggered the alarm.



Visual analysis software is much more effective when connected to thermal imaging cameras. "A trespasser shows up very distinctly due to the thermal contrast", explains Krüger.



Krüger points out the flood-threatened areas on a map.



Branches moving in the wind caused many unwanted alarms in this location, so Krüger decided to replace the CCTV camera with a thermal imaging camera. Not one unwanted alarm has occurred since.



These thermal imaging cameras from FLIR monitor one of the flood-threatened areas. They need no lighting to be effective and due to their long range capacity they can cover the entire area from a safe distance.

that's not their only advantage. "Both the FLIR SR-313 and the FLIR SR-324 have an excellent range performance." Depending on the conditions these two thermal imaging cameras can detect trespassers at a range of up to respectively 450 and 780 meters.

Better Range with Thermal Imaging Cameras

Thermal imaging cameras in general have a better range performance than CCTV cameras, explains Krüger. "With a CCTV camera you have to depend on visual contrast to be able to see a person that's trespassing, but that can be quite difficult, especially when lighting conditions aren't perfect, such as on a cloudy day for instance. The contrast on a thermal image is much bigger, due to the difference in temperature and thermal radiation between a person and his surroundings. Due to that fact you can detect a person with a thermal imaging camera at a larger distance than with a CCTV camera. And because you can see farther with one camera, you need fewer cameras to cover the same area."

'Very Good Return on Investment'

According to Krüger this makes thermal imaging cameras very cost-effective. "Not only because you need fewer cameras. Installing a complete security solution involves a lot more than just the camera itself. There's an entire infrastructure you have to take into account. For every camera you install you need a power supply line, a mast for the camera to be mounted on and with a CCTV camera you also have to install several streetlights to make it effective at night. A thermal imaging camera needs only one mast and no lighting. The total cost of ownership for a thermal imaging camera is extremely low so even though the price of one thermal imaging camera is higher, in the end it is cheaper to install a thermal imaging camera than to install several CCTV cameras. In my opinion thermal imaging cameras really offer a very good return on investment."

Monitoring Inaccessible Areas

The better range of a thermal imaging camera isn't just important for costeffectiveness explains Krüger: "Due to the longer range you can use thermal cameras to monitor inaccessible areas that are difficult to cover with CCTV cameras. Here at Infraserv Höchst we have the problem that some parts of the perimeter we monitor are under constant danger of flooding, because we're located on the banks of the river Main. That situation makes it very challenging to secure those areas. Ground sensors or fences are not an option due to the floods and CCTV cameras combined with lighting also proved to be an ineffective solution, for the floods would damage the power supply of both the cameras and the lights. But with thermal imaging cameras we can put a camera outside the flood-threatened area, looking in, and thus secure that entire area without risking flood-related damage."

Fewer Unwanted Alarms with Thermal Imaging Cameras

In Krüger's experience, there is also a significant difference between thermal imaging cameras and CCTV cameras in the amount of unwanted alarms. "We have about one unwanted alarm a week with our CCTV cameras. With our thermal imaging cameras we have about one a year, if we have any at all." "Our video-analysis software, Aimetis Symphony, uses complicated algorithms to detect and analyze movement", explains Krüger. "The software then compares the perceived movement to previously defined parameters and if the movement is not within those parameters, an alarm goes off.

But not every unauthorized movement is a trespasser. The cause of such unwanted alarms can be a spider crawling across the camera's lens, branches of a tree moving in the wind or even graffiti on a moving train." Thermal imaging cameras trigger fewer unwanted alarms, according to Krüger. "The difference between thermal imaging cameras and CCTV cameras is the contrast. CCTV cameras rely on visual contrast where thermal imaging cameras rely on thermal contrast and that difference is very important, because the thermal contrast is much bigger than the visual contrast. The branch of a

tree moving in the winds does not show up as distinctly in the thermal image as a person does. That means that it is easier for the video-analysis software to separate actual intruders from other types of movement on footage from a thermal imaging camera. This reduces the amount of unwanted alarms and that in turn saves us a lot of time and money."

Spider Webs and Sun Glare

The unwanted alarm problem isn't the only issue where thermal imaging cameras defeat CCTV cameras, even during the day: there's also the issue of sun-glare. "When the sun shines directly into the lens of a CCTV camera it is rendered completely useless" explains Krüger. But this problem doesn't just occur with the sun directly shining into the lens, it can also shine into the lens indirectly due to reflection. According to Krüger this happens quite often with spider webs. "Sometimes there's a piece of spider web in front of the camera that's so small that you hardly even notice it. But when the sunlight hits the web in a certain angle it is reflected into the lens, blinding the CCTV camera exactly like when the sun shines directly on it. In such cases one of our staff must go and remove the spider web if we want to be able to use the camera effectively."

Identifying Trespassers

According to Krüger thermal imaging cameras are superior to CCTV cameras on all fronts. "In fact, the only reason I still use CCTV cameras is that they can be more effectively used to identify trespassers. That's important information, because we can better assess the situation if we know what type of intruder we're dealing with and if we decide to prosecute the trespasser we give the footage to the police. If we could use the thermal imaging cameras to do that than normal CCTV cameras would be obsolete."

Ifsec · Hall 5 · Stand E60

▶ CONTACT

Flir Commercial Systems B.V., Breda, Netherlands
Tel.: +31 765 794194 · Fax: +31 765 794199
flir@flir.com · www.flir.com

Bertrand Völckers

FLIR Commercial Vision Systems, Berlin, Germany
Tel.: +49 30 373 03 972
flir@flir.com · www.flir.com bzw. www.flir.de

DIGITAL
ABSOLUTE
 PLUS

DIGITAL
Dual TECHNOLOGY Barrier
 range 200 mt.

IMN200RS series

State of the art combination of Microwave and IR technologies to assure maximum protection while drastically reducing false alarm rates due to uncontrollable agents.

- Detection Mode: MW + IR
- Range: 200 mt.
- Heights: 2.0 - 2.5 - 3.0 - 4.0 mt.
- Nr. of IR beams: from 2 to 8
- Nr. of microwaves: 1 / 2
- Alarm signal: Contact Relay and/or RS-485
- RS-485 output for remote programming and diagnostic

SICURIT
 ALARMITALIA®

outdoor protection
 our profession

SICURIT Headquarter
 Via Gadames, 91 Milan - Italy
 T : +39.02.380.70.1
 F : +39.02.308.80.67
 I : www.sicurit.com
 E : export@sicurit.it



PERIMETER PROTECTION

Securing the Gateway to Paradise

Mauritius Airport Extends the Value of Its Surveillance Investment through Integration

Since Mauritius gained independence from the United Kingdom in 1968 and became the Republic of Mauritius in 1992, the Republic's economy has grown 5–6 % each year, moving from reliance on sugar cane production to diversification into industrial, financial and tourism sectors. Plaisance Airport on the island of Mauritius was founded for military purposes by Britain's Royal Air Force in 1941 in the south-east of the island. Commercial flights commenced from 1946 at the location, 50 km south-east of Port Louis, the capital of Mauritius. A new terminal was built in the late sixties and the airport grew with the national airline Air Mauritius which was launched in 1967 and the boom in tourism to the island. The main passenger terminal in use today was built in 1987. The airport was renamed to commemorate Sir Seewoosagur Ramgoolam (SSR), Mauritius's first Prime Minister after independence.



The Growth of SSR International Airport

SSR International Airport is owned and managed by Airports of Mauritius Co Ltd (AML), a state-owned company operating under an aerodrome license from the Department of Civil Aviation of the Government of Mauritius. Through AML, the Government of Mauritius wanted a company who could exploit the commercial potential of the airport, and expand to cope with the expected growth in passenger and freight traffic.

AML is responsible for planning and developing airport infrastructure as well as managing and running airport operations. In 1999, AML invested US \$20 million to expand and upgrade the main terminal by an extra 8,500 m², adding an extra level to the existing terminal. The ground floor is now for arrivals, while the first floor is for departures.

SSR International Airport handles 2.1 million passengers, 20,000 aircraft movements and over 40,000 tons of cargo each year. It has one runway which handles around 60 aircraft movements per day with flights from 14 airlines including Air Mauritius, Air France, British Airways and Emirates. AML employs 400 people, and has developed a plan to manage the predicted traffic of 3.1 million passengers by 2012, and a doubling of aircraft movements by 2022, as it develops the role of the airport as the hub for the region.

Security at SSR International Airport

Security requirements at SSR Airport are laid out and regulated by the Department of Civil Aviation (DCA). Various security bodies operate within the airport – the police, who are responsible for primary access and policing duties, the DCA which issues airport passes, plus other government bodies such as Immigration and Customs. In Mauritius, it is required by law to screen staff, passengers and luggage, provide security in the terminal and airside and put measures in place to control access to any restricted zone.

Controls must also include specific measures for airside security and airport perimeter fencing control and protection of vulnerable points (e.g. power center, water reservoir etc). Airside encompasses the runway, taxiway, apron, hangars and surrounding area, and needs to be highly secured. The key considerations for security at SSR Airport are the safeguarding of the airport operation and protecting assets against acts of unlawful interference.

Building a New IT Infrastructure

After the creation of Airports of Mauritius Ltd (AML) in 1999, one of AML's key tasks was to re-develop the airport so it could compete internationally and run on a commercial basis to ultimately generate profit. To help with this endeavor, AML signed a management agreement with British Airports Authority (BAA). AML also recognized that IT was a key ideology of any international airport. A new IT department was thus formed within the new business, with

the department headed up by a new appointed manager of IT services. The IT infrastructure across the airport as a whole had evolved on an ad hoc basis during the mid-nineties.

Many of the airlines and businesses within the airport had installed their own private IT networks, using their own cables and managing their systems independently. This had resulted in unstructured development, with extensive duplication of cabling and equipment making the management of changes and alterations difficult, with little co-ordination between the different parties.

Such issues were not new to BAA, and to remedy such problems, BAA had implemented a central common-use multipurpose IT and communications infrastructure across its UK airports, and had witnessed that most airports were starting to adopt this model. With this advice, in December 1999 AML went ahead with the design and implementation of a resilient and scalable data network backbone and structured cabling system. As part of its drive to generate revenue, AML proposed charging its tenants for usage of its managed network infrastructure. For many tenants, this shift was not easy to assimilate and it took a long time before gaining full acceptance. The previous chaotic, unplanned approach to IT was replaced with a centrally managed infrastructure controlled by the airport's IT department. The infrastructure has grown to become amongst the biggest and most complex on the island and used by all agencies operating at the airport.

The Need for a New Surveillance System

The IT department's brief was far reaching. Charged with redeveloping the whole IT infrastructure of the airport there was a need to ensure that IT could keep ahead of the ambitious expansion plans for the SSR International Airport. Its remit extended from managing operational IT at the airport, and unusually, the specific development of IT infrastructure for physical security, including surveillance. The previous CCTV security system was ageing, was entirely analog and provided poor quality black and white images. Following re-development of the terminal in 1999–2000, the system was gradually dismantled and finally turned off.

Starting the Search

In 2001, the manager of IT services went ahead to explore the installation of a new CCTV system. Contractors were brought in and the first contractor developed an analog system design which was not taken up. Another demonstrated a system based on network cameras, and its main advantage was that it could use the existing data network. But in 2001, it was decided that the image quality from network cameras available at that time was not comparable to analog cameras of the day. The project was then placed on hold indefinitely.

As a result, the airport operated without a functioning CCTV system which led to the use of

extra security personnel. A major disadvantage in this approach was a lack of recorded video evidence of incidents. Pressure built up from the senior management at AML, law enforcement agencies and the airlines for the IT department to address the situation and source a new surveillance system.

Laying Down the Objectives

In 2003, the surveillance project was re-started and physical objectives were set for the project. The system needed to provide a safe and secure airport environment, but also create the option of revenue generation through delivering security surveillance as a service to companies within the airport. Four key aims were established. First, to improve the security and safety at the airport; second to improve efficiency of operations and standards of service to the travelling public; third to respond more effectively to emergency situations. The final objective, an indication to the direction of the end solution, was to provide monitoring and control facilities to AML and other agencies through a multifunctional computerized management system.

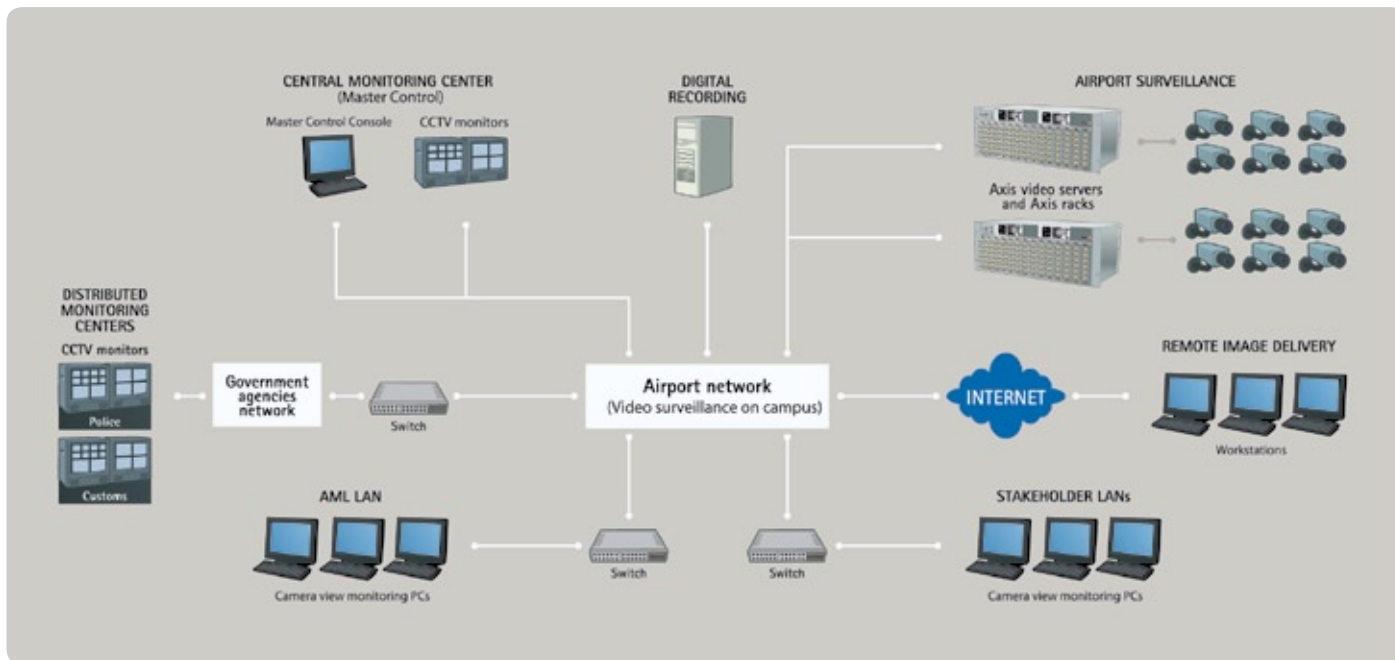
Examining the Technology

A detailed brief was developed in-house as it was believed the project could be planned internally without using external consultants. A wide range of research material was used to incorporate the latest IT and security surveillance thinking into the brief. From the outset, the belief was that the new surveillance system had to be IP-based, after the airport had invested in networking and felt that an extensive coax network was a step backwards. An IP-based solution also met one of the key early objectives, in that the companies and third parties based at the airport would be able to access the system on the shared airport data network. Back in 2003 questions arose about early design network cameras concerning bandwidth usage and image quality. Security managers at the airport perceived that analog camera image quality was better than with a network camera – but as long as images were sent using the data network the IT department was happy to explore generating images through either analog or network cameras.

Defining an Integrated Airport Management System

The information contained in the tender document also included the provision and integration of a security access control system with the video surveillance system. It outlined the IT infrastructure that would be at the disposal of the winning contractor and focused on the required capabilities of the system.

The required system principles were defined as an efficient system, cost-effective, reliable, and scalable as well as completely fault tolerant. It was to have a wider purpose than just security; it was to be an airport management tool



System Implementation: Through integration with building management systems, surveillance is helping manage airport operations through flagging up situations across the site.

to monitor operations, enabling a quicker, more appropriate response to incidents. It would result in less security staff patrolling the airport, so security could be deployed at targeted incidents. The system would also provide much needed post-event analysis and recording.

The draft tender document was ready in spring 2003, and was offered for consultation across all airport functions. Additional views were incorporated into the document. It was also decided that it would be useful to integrate the surveillance system with other airport systems such as fire alarms and building management.

Also outlined was the desire to make the system available to off-site users through the airport's WAN (Wide Area Network). An International Expression of Interest was issued in late summer of 2003, which attracted 27 responses. The tender review process reduced the list to two companies and the Letter of Award was issued to the winning contractor, Grintek Ewation Pty in October 2004. A spokesperson at SSR Airport commented: "Two companies stood out in the tender process, both of the proposed tenders were IP-based; the losing company had an early hybrid IP system. We wanted an open system with open standards, their system featured devices that were proprietary black boxes so you would be more reliant on the supplier if things went wrong. This was not exactly what we were looking for."

System Implementation

South-African based Grintek Ewation Pty is majority-owned by Saab Grintek, one of the fifteen business units comprising the Swedish-owned Saab Corporation. Grintek has 35 years' experience in the implementation of security systems. The contract awarded was worth 2 million Euros

(US \$2.55 million), and the pilot phase began in January 2005.

The new system was designed to integrate with Honeywell Electronic Buildings Integrator (EBI) which is built using an open Microsoft Windows platform. This platform integrates into Honeywell's security, life safety, HVAC (heating and ventilation) and building manager systems. Video management is controlled by Honeywell's Digital Video Manager (DVM), a software-based digital surveillance and video management solution, running on a Windows 2000/2003 computer.

Across the airport the plan incorporated 130 fixed analog cameras, 60 dome analog cameras and 10 analog PTZ cameras. To encode the analog signals, the video feeds from the cameras terminated into nine racks of Axis blade video servers located across the airport. By running coax to nine racks, long cable runs from the camera to the control room were avoided, making maintenance and system management easier.

The system specification asked for a solution that could be dramatically expanded. With a possible requirement of 350 cameras by 2011, this approach of routing camera feeds to racks of servers was scalable. The racks incorporate a total of 35 AXIS 2400 4-channel blade video servers, and 70 AXIS 2401 1-channel blade video servers. The video servers convert the analog input into digitized images. A separate network was recommended by Grintek for added robustness, and to cater for bandwidth limitations.

Camera View Monitoring PCs

On-the-ground research pays off. The security staff at SSR Airport tested a wide range of different cameras, both digital and analog. The tests involved environments with varying levels of light. Glare was found to be an issue for cam-

eras based near entrances facing to the outside of the terminal.

A spokesperson at SSR Airport commented: "Our security teams did many tests. For example, as you enter through the terminal doors, the request from the security authorities was the need to identify passengers, so some of the cameras faced these doors. Glare from outside was reflected on the floor and we needed cameras that could cope with this."

Wireless links for remote areas of the airport were considered and a trial established, but the links were abandoned. Prolonged heavy rain is common on the island, and this could cause signal dropout, so cameras in these areas were linked by fiber-optic cable.

Integration Enables Tighter Management of Incidents

Honeywell's EBI constantly monitors all building systems, while Honeywell's DVM offers automatic video display and recording of abnormal events across the airport. Numerous fail-safe mechanisms are built into the DVM. If, while recording, a video server receiving the data fails, it automatically switches to a back-up video server, or any other nominated server on the network.

The system allows users to view and record on-demand the output of any camera or to schedule timed recordings. It also allows for automatic video display and recording if motion is recorded within a defined area. As the DVM links in with the wider EBI, controlling fire, access control and HVAC, it will automatically display visuals of individuals who are denied access to a restricted zone or, where a fire alarm is activated, relay an instant picture to help manage these sorts of events at the airport. A practical example of this is when the luggage conveyor

belt becomes blocked. Previously an alarm would sound, but this was not flagged up centrally so unless a member of staff was in the vicinity and heard the alarm the problem would go unnoticed. With the DVM, the alarm can be integrated into the EBI system, and the cameras would then show footage pinpointing the exact location of the problem.

Another benefit is the video recording of any incident can be reviewed to help with training and to improve procedures. New members of staff at SSR International Airport are trained using stored video footage to highlight the range of situations that can occur, and to work through a 'best practice' response.

Speed of Image Management Aids Law Enforcement Agencies

Central monitoring is carried out at the airport's operations control center. The center is set up to display images for all cameras throughout the site. Camera viewing and alarm notification is also controlled through dedicated workstations. Access to images is quick and simple as the DVM features a powerful search facility with instant retrieval. As the system is designed to record incidents and abnormal events, the recordings stored only show the events, which saves scanning through hours of videotape.

At SSR International Airport, high quality video files are quickly sent via DVD or any requested media to the appropriate authorities. The DVM system is also available for use by the police, law enforcement and other relevant third parties, either on-site or at their own off-site offices via the airport's WAN.

Every exported recording is digitally signed to provide authentication of the origin of the recording and proof that the recording has not been tampered with. The system provides an audit trail log. Digital signatures combined with the audit trail enhance the evidential weight given to video files when they are used in legal proceedings.

Building Security on Sound Foundations

The system installed at SSR International Airport in 2005 incorporates many groundbreaking concepts with its reliance on the airport's data network to distribute images as well as the integration with a wide range of airport management systems. Managing the sheer volume of video footage is now controlled through the Honeywell DVM system, which allows greater targeting, displaying and recording of specific incidents, rather than storing hundreds of hours of routine images which cannot be readily analyzed if an incident does occur.

The airport insisted on developing an infrastructure that would not have to be 'scrapped every five years', and is now looking to expand the system to 350 cameras by 2010. The airport's ambitious expansion master plan running to 2020 also incorporates plans for expansion of the surveillance system in tandem with building management system upgrades.

A spokesperson at SSR Airport commented: "In the future we will see more integration and expansion. We are very happy with Grintek, they are perfect on general integration and hardware, and we had no major difficulties making the system work. One piece of advice – technical people always need someone with a security background to get the feel of the surveillance system from a user perspective.

Security people do not visualize in the same way as technical people do – so it is vital to be in touch with both skill sets when building a system of this magnitude".

Ifsec · Hall 4 · Stand E90 and E140

CONTACT

OFFICE BUSINESS PARTNER

Axis Communications AB, Lund, Sweden
Tel.: +46 46 272 1800 · Fax: +46 46 13 61 30
www.axis.com

See Tec
Software for Video Security



Video Management Software

MADE IN GERMANY

- Cutting-edge technology
- Scalable and flexible
- Secure and reliable
- LPR and video analysis
- Vertical solutions



www.seetec.eu

CCTV

Generating Efficiency

Innovative Use of IP Video Surveillance Helps Power Plant Operation

EON Benelux has deployed IP video surveillance technology beyond its traditional security role to create a more efficient business operation at its Dutch power generation complex in Rotterdam. Using IndigoVision's distributed IP video solution, it has extended the use of surveillance at two of its electricity generating stations to process control, health and safety and logistics, as well as site-wide security. The flexibility, scalability and resilience of this system have enabled the company to innovate its surveillance capability through three separate projects installed over the last three years.

In 2008, the original analog CCTV equipment was replaced with an IP video system as part of a project to refurbish the central process control room that monitors the existing two coal fired plants MPP1 and MPP2. Three PC workstations running Control Center, IndigoVision's video management software, monitor the process around both plants including oil-burners, coal grinders, gypsum silos, fly-ash waste containers and coal storage fields. High-quality, guaranteed full-framerate video is recorded continuously on standalone fault-tolerant network video recorders (NVRs) for post process analysis if required. Four of the cameras have the supplier's real time analytics facility enabled to automatically detect problems at the fly-ash shoots.

This creates a much more efficient monitoring environment as Piet van Vliet of QCAT, authorized partner and system integrator for the project, explains, "Using the original analog surveillance equipment, EON required 14 people to monitor and control the plant. After integrating this IP video technology into the new central control room they can now achieve the same with only two operators - a significant cost saving."

Fresh Fields

Having realized the potential of IP video, in 2008, EON expanded the system to encompass the perimeter security surveillance around the



construction site of MPP3, the new generating station being built alongside the existing two plants. The distributed nature of the system allows the PTZ cameras, which are strategically located around the site, to be connected into the existing system. The cameras can be controlled and viewed from the central control room if necessary, but are primarily monitored on an additional Control Center workstation located in the construction site's security office. A separate standalone NVR located in the site office records video from the construction site only for evidential purposes.

In 2009, QCAT and IndigoVision were awarded a third project for a new video system to monitor and secure the entire logistics process across the complex. This encompasses the movement of personnel, visitors and supply vehicles as well as delivery of coal and biomass. Video from analog fixed and PTZ cameras is transmitted over a hybrid wireless and fibre network using the company's transmitter modules. The footage is accessible on the existing process control network and recorded by additional NVRs. Live and recorded video of the logistics operation can be viewed in the central control

room and at another Control Center workstation located in the harbour building. Being able to quickly locate evidential quality video clips of a logistics incident is fundamentally important for auditing purposes and to resolve any potential disputes.

The ability to continually expand and deploy a surveillance system for different applications requires a scalable and flexible architecture. Utility companies also demand resilience to ensure plant downtime caused by an incident is eliminated or reduced and this open distributed architecture and fault-tolerant video recording solution provides the necessary resilience and flexibility here. In the event of a major incident where the central control room is inoperative, operators can monitor the plant process from any other Control Center workstation, whether it is on the construction site or in the harbour office.

Ifsec · Hall 4 · Stand D20

▶ CONTACT

IndigoVision

Tel: +44 131 475 7200 · Fax: +44 131 475 7201

info.request@indigovision.com · www.indigovision.com

Uncompromising Vision

Capture the details with
AutoDome Junior HD camera from Bosch



IFSEC 2011

16-19 May 2011
NEC Birmingham, UK

Hall 5 Stand 5/D90



Meet the newest member of Bosch's AutoDome family: AutoDome Junior HD. This rugged, compact 360-degree, 10x PTZ camera delivers high-definition imaging up to 1080p resolution – capturing every detail from facial features to small objects. The camera's sharp, clear video is an indispensable asset for monitoring financial transactions or keeping track of small, high-value items, and its heavy-duty housing is proven to outlast, delivering years of dependable operation. **See the full Bosch HD solutions portfolio, including moving and fixed cameras, software and recording platforms at www.boschsecurity.com**



BOSCH

Invented for life

Salamanca is a city steeped in history which charms visitors with its unique flair and atmosphere. In order to protect the historical city center from vandalism and local retailers from thieves, a modern Dallmeier video security system was installed.



CCTV / PUBLIC SECTOR

Salamanca City Surveillance

Protection against Vandalism and Theft

Salamanca is famous for its historical sights: the oldest existing university in Spain, two cathedrals from the 12th and 16th centuries, the Casa de las Conchas or the Plaza Mayor, the heart of the city. All these buildings are built from the same material, Villamayor stone, which characterizes the entire cityscape with its distinctive golden yellow color.

But appearances are often deceptive. The idyllic city, which has been a UNESCO world heritage site since 1988, has had big problems with vandalism damage to the old buildings and break-ins into shops in the old town. Francisco Albarrán, Salamanca's transport and citizen security councilor explains: "It has been proven that the use of CCTV systems with permanent recording deters vandals and thieves. Therefore we decided to install a video security system covering the affected area of local retailers." After extensive on-site tests, a solution was finally chosen that best met the specific requirements of this installation. "Before the final decision to purchase was made, we wanted to comprehensively test the system under the real conditions on location. We also wanted to clarify the performance under different light conditions beforehand, which is why we tested the system in daylight as well as at night under street lighting," said Albarrán. The result was convincing, especially the good picture quality. Albarrán commented: "Now we have a high quality and reliable tool at our disposal, to monitor the entire historical city center and the shopping zones."

Installation in Accordance with Monument Protection Standards

Multiple PTZ cameras from the Domera range were installed in Salamanca by local partner Plettac electronics. The cameras feature a Pan/Tilt/Zoom mechanism with 248 programmable preset positions and integrated motion detection. Both IP cameras as well as analog models, which are integrated into the network via micro streamers, are used. The images are recorded 24 hours a day onto a DMS 240 IPS In Memory of Leonardo, a video server with up to 24 IP channels. It supports both SD as well as HD resolutions (720p, 1080i, 1080p) up to 8 megapixels.

System control is carried out via the Pview video management software. It provides the user with live picture transmission or playback of recorded image material, data retrieval through various search and filter criteria, virtual tours or configuration of the recording server on the network.

The installation of the video system was tied to strict restraints, as Francisco Albarrán explains: "The historical city center is listed, so that no large structural changes are allowed to be made. The appearance and the atmosphere of the old town should not be disturbed through the presence of surveillance cameras." The manufacturers and the installers together developed a solution that was "Catálogo de Patrimonio" certified and had the approval of those in charge of the municipal architecture and monument protection. The use of a radio network for video transmission made it possible to reduce the structural costs and swift installation of the entire system

was also possible. Furthermore the visible elements such as cameras, control cabinets and antennae were blended into their surroundings.

Bandwidth Challenge

Although the use of a radio system brings many advantages, you come across an apparent problem to begin with: bandwidth. Because multicast based on a radio network was not possible, image transmission quickly led to a network overload. "We now use a special solution with adapted unicast transmission, which Dallmeier developed especially for us," said Albarrán. "Despite the limited bandwidth of a one Mbit radio network, we can now get a high quality level of image transmission."

Golden Times in the Golden City

In the meantime, the video system has proved itself in practice: "Since the installation and start-up of the CCTV system, we could see a fall in the number of vandalism cases in the monitored zones. Additionally, the recordings have helped us clear up incidents quickly and conclusively," explained José Luis Serrano Paule, superintendent of the Salamanca Police. Francisco Albarrán adds: "We intend to expand the surveillance to a larger area of the city center."

Ifsec · Hall 4 · Stand D80

▶ CONTACT

 BUSINESS PARTNER

Dallmeier electronic GmbH & Co. KG,
Regensburg, Germany

Tel.: +49 941 8700 0 · Fax: +49 941 8700 180
info@dallmeier.com · www.dallmeier.com



CCTV

Beauty Is in the Eye of the Operator



reddot design award
winner 2011

Barco's video walls are known for
their image quality and reliability.

But they are also cleverly designed:

The OL-521 LED-lit projection module
received the prestigious red dot
award for outstanding product design.

The red dot design award is an annual competition awarding the products that excel in a large number of design criteria, including innovation, functionality, ergonomics, formal quality, durability and ecological compatibility. Barco convinced an international jury with the OL's space-saving cube design and small footprint, while providing the brightest and warmest colors on the display thanks to novel technologies such as liquid cooling.

Reduced Footprint

The main design drivers were the introduction of LED-technology in video wall cubes, a long lifetime, full front and rear serviceability, minimal field adjustments and maximum reuse of components over the eight variants in the OL family. Furthermore, there was special attention to limit the footprint, decreasing shipment volume, weight and required control room floor space.

User Comfort at the Forefront

But the most important consideration in the design process was user comfort. "It was very essential to guarantee color uniformity throughout the complete video wall. By introducing Sense6, Barco's proprietary automatic color calibration system, we tackle this challenge and are able to deliver the perfect images throughout the video wall lifetime," comments Tom Dewaele, Design Expert control rooms at Barco. "Furthermore, we introduced the 'hang and flip' principle to ensure an ergonomic installation of one module to another. A motorized shift and tilt system also eases the geometry optimization. Fitting all these features so swiftly in the cubes was a big challenge for our R&D team, but by combining all complementary skills and working perfectly together, we managed to deliver this truly amazing result."

Ifsec · Hall 4 · Stand E100

▶ CONTACT

Sophie Hautekeete

Barco NV Security & Monitoring Division,
Kuurne, Belgium

Tel.: +32 56 36 8059

sophie.hautekeete@barco.com · www.barco.com

The World's First Open
HD Surveillance Platform

www.avigilon.com



AVIGILON
THE BEST EVIDENCE™



“Superior image clarity combined with the system's advanced management features for fast and easy video recording and playback make Avigilon today's ultimate choice in HD surveillance.”

Airberg

CONTROL ROOMS

Square Eyes

An Advance Look at Some Eyevis Products on Show at Ifsec

Faced with a gigantic wall full of TVs in an electronics shop, the consumer is bombarded with products that are loaded with features that he probably doesn't understand and often doesn't need. The commercial purchaser of monitors on the other hand will find a much smaller and more sensible choice of products on offer that are specifically designed for particular purposes. Eyevis will be showing their range of professional display and associated products in Birmingham at Ifsec in mid-May.

The company, well-known for its video walls, will be demonstrating its new super narrow bezel screens with direct LED backlighting in 55" and 60" versions. Following on from their successful 46" LCD version, these new displays come with full HD resolution and a direct LED backlight, which provides not only homogenous brightness but also perfect colors and contrast. The new devices feature a robust metal housing to ensure that video walls are stable and simple to assemble. The ultra-super narrow bezel allows a minimal gap between the active contents of neighboring screens of only 5.7 mm.

The Eye LCD6000 SN is an LCD screen providing WXGA resolution (1,366 x 768 px) and a gap of only 6.5 mm between two displays. To avoid hotspot effects on the screen, it has direct backlight illumination that provides uniform brightness over the entire screen area. Getting ever slimmer is not only the target of many people but also that of the screen manufacturers. With a depth of only 4.6 cm, the Eye LCD5500 LHD professional-grade edge-lit LED and LCD

monitors are stand-alone devices with full HD resolution on a 55" screen. The new edge-LED backlight allows the depth of the device to be significantly reduced compared to the preceding version with traditional CCFL backlight.

Sign Up

The new Eye LCD3800 PAN represents the first bar-type LC display of the Eye LCD series. With a screen diagonal of 38" (ca. 97 cm) and a resolution of 1,920 x 510 pixels, the display is ideal for digital signage applications. Its aspect ratio of 16:4.18 provides a perfect surface for the presentation of advertisements, menus or price lists. It is optionally available as an outdoor vandalism-proof version or with an optional embedded PC. The device can also be delivered in almost any customized color to suit a company's corporate design.

In the past, the distribution of DVI signals was realized with hardware based matrix switchers. Providing these kinds of signals in different rooms or other locations across long distances



has become an important issue and the Eyevis ESe-Streaming solution now provides a technology to transmit DVI Signals in real-time across networks with very low latency. The system is built around an encoder/decoder solution, which transmits the signal over networks using a special eJPEG compression that needs only a little bandwidth on the network. The signals can be decoded again anywhere without loss of quality. This functionality provides a flexible, virtual network matrix with a wide range of possibilities to transmit signals.

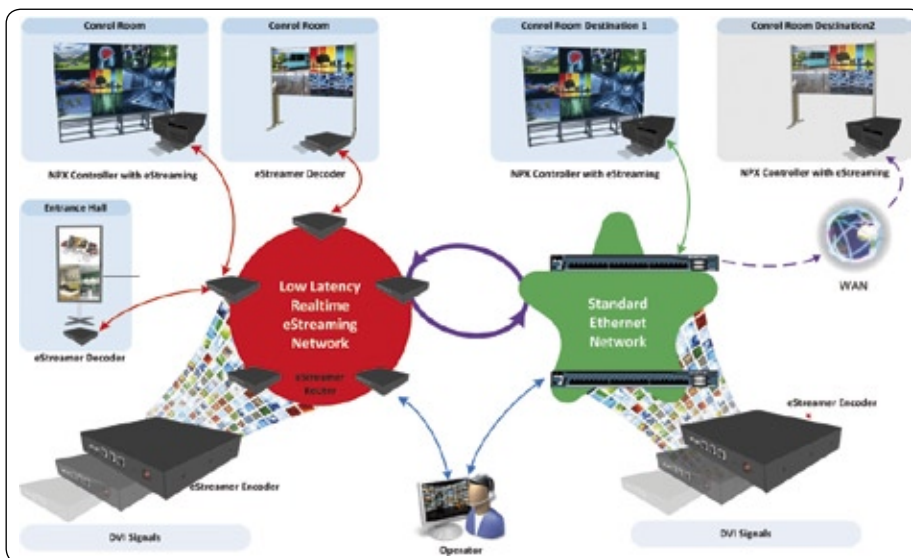
Cubic's Ruse

In 2009 the company showcased the world's first DLP Cube based on LED-lit projection. Two years on, the company is now offering a 3x3 video wall with 70" cubes at a resolution of 1,920 x 1,200 px each and a 3x1 video wall comprising a 50" SXGA+ cube (1,400 x 1,050 px), a 67" full HD cube and a 50" XGA cube (1,024 x 768 px). Besides the enhanced life-time of the cubes compared to their lamp-based ancestors, they provide remarkably improved color representation. The systems feature automatic color adjustment to ensure stable and uniform image representation over all the modules in a video wall.

Ifsec · Hall 4 · Stand D145

CONTACT

Max Winck
 eyevis GmbH, Reutlingen, Germany
 Tel.: +49 7121 43303 0 · Fax: +49 7121 43303 22
 info@eyevis.de · www.eyevis.de





It's the **all-in-one**
megapixel solution... **for all.**

Our new MegaView™ Series Megapixel Cameras bring mainstream video surveillance applications clearly into view. Arecont Vision's all-in-one design combines the outstanding resolution of megapixel imaging with the efficiency of H.264 compression, IR LED Array Illumination with Day/Night operation for use in complete darkness, and weatherproof IP66 rated, vandal resistant bullet-style housings. Plus all the performance features you demand like programmable motion detection, privacy masking, unrestricted image cropping and so much more. Available in four sensor types, the MegaView™ Series cameras are made in the USA and include the 1.3-megapixel AV1325, 1080p AV2825, 3-megapixel AV3125 and 5-megapixel AV5125. They're the all-in-one megapixel solutions for all.

 **Arecont Vision**
megapixel technology...
beyond imagination

+44 (14) 4085 8054 • arecontvision.com
MADE IN THE USA

An effective solution for small- to medium-sized systems which is now for free till 16 channels.

Axxon Smart Pro 2.0 is a professional video surveillance system for small-scale deployments such as gas stations, hotels, auto servicing centers, stores, parking areas or houses. The system can link up to 4 video servers, each with 64 cameras, making a total of 256 cameras. Five client workstations can be connected to each video server.



VIDEO MANAGEMENT

Till 16 Free



Axxon Smart Pro 2.0 Offers a Solution for Small- to Medium-sized Systems

Axxon Smart Pro 2.0 sets a new standard for functionality. With its innovative user interface, state-of-the-art video analytics, event response configuration capabilities, role-driven multi-user access, as well as support for a multitude of IP devices and capability to create separate video archives for different alarm types with individual recording settings, Axxon Smart Pro 2.0 provides an unprecedented range of features.

Axxon Smart Start

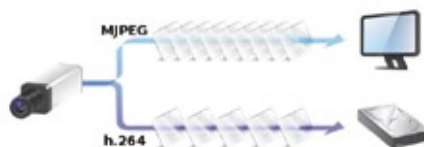
Axxon Smart can be downloaded for free on the website of AxxonSoft. It supports up to 16 cameras and an unlimited number of client workstations can be connected to one video server. If more than one server will be needed, Smart Start can be upgraded to Smart Pro without any problem. Only the video archive is limited to 1 Tb. But if needed it can be easily upgraded.

Axxon Smart supports analog and IP cameras. It comes with seamless integration for more than 400 different models of IP cameras and IP video servers from the markets principle leading manufacturers. For even more compatibility the ONVIF protocol is supported. Axxon is a contributing member of the ONVIF global open standards industry forum and the company is always expanding the list of integrations. New integrations come as separate Driver Pack module with its own installer. This enables to add support for newly integrated equipment without reinstalling the entire software. Axxon Smart also supports

all popular IP compression formats, including MPEG-4, H.264 and MJPEG.

Display H.264 Images Avoiding Performance Drop

Axxon Smart supports H.264 video stream decoding using a graphics card. For this purpose, Axxon Smart employs Nvidia CUDA parallel computing technology that is implemented in most current video cards based on Nvidia chipsets. CUDA enables a significant increase in video system performance while reducing the load on the CPU.



User Friendly

AxxonSoft specialists have analyzed the most usual situations during daily operation of a video surveillance system and have designed optimal user interface to deal with – including touch screen. This concept has been implemented in a unique OpenGL-based interface for which every detail was well thought to give the user maximum convenience and on-the-fly control. To provide convenient configuration automated device discovery is supported. And for PTZ control convenient, analog-like virtual joystick is employed.

Built-in Video Analytics

Video analysis tools help to optimize operator actions. They recognize alarm situations and draw attention to important events. This eliminates the need for the operator to constantly analyze information coming from a multitude of cameras.



Axxon Smart Pro 2.0 supports embedded video analytics for cameras and has its own video analysis algorithms that include 11 types of detection:

- motion
- background change
- drop of video quality
- abandoned object
- cross line
- movement in a restricted area
- stopping in a restricted area
- loitering
- zone entry
- zone exit
- embedded video analytics from IP cameras

The product also implements two types of audio detection:

- noise detection – reacts when a certain noise threshold is exceeded
- silence detection – reacts when the noise level drops below a certain threshold (or connection with microphone is lost)

Response Scenarios

The video analysis functions are enhanced by automatic system response scenarios. A video, audio or sensor event can trigger one or a combination of the following responses:

- initiate recording of video and audio from a camera
- send SMS notification to one or several subscribers
- send email notification to one or several addresses
- play an audio message
- send a signal to an actuating device (relay) connected to a camera
- move a PTZ camera to a pre-set position
- change to alarm handling mode

Alarm Handling Mode

This function implements a new, interactive approach to working with a video surveillance system. When an alarm event occurs, a notification is sent to the operator. Then the operator must assess the event's level of importance (or po-

tential hazard) on a three-level scale. All registered alarms are visually displayed on a timeline where they can be organized by importance and thus video records corresponding to the alarm events can be easily found.

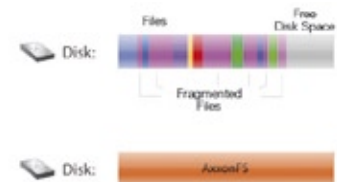
This alarm handling mechanism enables not only more convenient control of a facility but also control over the action of operators when securing that facility thereby significantly reducing the percentage of neglected alarm events.



Unfragmented Video Archiving

Video recording utilizes a specialized file system that completely eliminates the problem of fragmentation. Loop recording is employed to write monolithic files to disk (reformatting of disks is not required). Thanks to this, video recording speed approaches the theoretical maximum speed for recording to hard disk and does not deteriorate over time due to file fragmentation.

For each camera, the user is able to not only assign recording parameters but also specify the write location (archive file). Recordings initiated by different events can be written to separate archives. Thus, a separate, large-volume archive can be created for important events like alarms. When employing loop recording, alarm events can only be overwritten by other important alarm events and not by everyday recordings that may not contain any important information. This flexible approach to archive creation and the specific file system enable significant disk space savings, quicker access to archive files and reduced wear on disk drives.



Ifsec · Hall 4 · Stand F105

▶ CONTACT

AxxonSoft GmbH, Wiesbaden, Germany
 Tel.: +49 611 1575140 · Fax: +49 611 1575141
 johanna.flohr@axxonsoft.com
 www.axxonsoft.com



Quality that will make you smile!

You can now choose an option with a small but highly significant difference – because once again, you can rely on Grundig's outstanding quality and smart technology. For video security that lives up to its promise when it comes to operation, installation and service. For further information, please visit www.grundig-cctv.com.

Video security designed in Germany is back!

FOR A GOOD
REASON
GRUNDIG



IFSEC 2011

16-19 May 2011
 NEC Birmingham, UK

Come and visit us on stand 5 / C 30

One of the largest sources of loss is caused especially by theft of high-class merchandise. Shrinkage and loss prevention very often lead to great loss in sales. Mainly smaller, value-conscious retailers or newly founded companies, which cannot afford expensive or not yet profitable anti-theft solutions, are affected.

ADT has launched the Sensormatic Essentials Platform, an electronic article surveillance (EAS) product suite designed specifically for smaller, or newly founded companies. With the Essentials Platform Europe's leading provider of electronic fire and security solutions delivers a cost effective and reliable and tailor-made anti-theft package which is focused on the individual requirements of each customer.



SECURITY FOR RETAIL BUSINESS

Effective Bundle

EAS Product Suite Designed Specifically for Smaller, Value-conscious Retailers



According to the Global Retail Theft Barometer* 2010, retailers in Central Europe lost more than € 4.9 billion due to shrinkage, representing 1.12 % of retail sales. Shoplifting represented the largest source of loss at 52.7 % of total shrinkage, posing a serious threat to the retailer's bottom line. The Barometer also found that 28.3 % of the products most susceptible to theft are not protected Europe-wide. Controlling shoplifting, while continuing to provide an enjoyable shopping experience for customers, is a daily challenge for many retailers. Therefore the Sensormatic Essentials Platform includes all the fundamental EAS components necessary for retailers introducing anti-theft technology into their store environment easy and quick to install – so that they have more valuable time for their core business: customer service.

Sophisticated Electronic Article Surveillance (EAS)

The platform uses the highly effective "UltraMax" acousto-magnetic (AM) technology, which belongs to the most frequently used electronic article surveillance (EAS) since the introduction into the retail market by Sensormatic. Advantages of the acousto-magnetic (AM) technology are amongst other things that the technology offers wide coverage between pedestals, no false alarm and a wide range of hard tag. On that basis with the Sensormatic Essentials Platform ADT offers a wide range of hard tag, a low-profile deactivator and a modern open framed detection pedestal system.

The Detection System offering coverage of 1.8 metres between pedestals. The sleek, modern detection pedestals are highly durable constructed from ABS materials and blend seamlessly into all retail formats while providing a strong visual deterrent. Audio and visual alarms are integrated into the primary pedestal to notify store personnel of theft attempts. The deactivator features an ultra-thin design which blends easily into the point of sale. Detection range is up to 20 cm and labels up to 13 cm in size can be deactivated. Cashiers are able to pass items easily over the antenna, quickening the checkout process, while audible and visual indicators confirm that

labels have been detected and deactivated.

Many Options

A range of hard tag options for protecting a wide selection of items from apparel to accessories. Hard tags available include three different designs featuring UltraMax technology; an apparel tag, a one piece steel lanyard tag and a one piece nylon plastic lanyard tag. All these tags are of light-weight construction and have a small footprint providing a strong visual deterrent without adversely affecting the goods on display. The tags' shape and construction is designed to minimise the ability for thieves to attack them by hand or with tools. In addition, a selection of tags designed for protecting small or delicate merchandise such as jewellery, small electronics, cosmetics and fragrances are available. The compact design ensures very low impact to the merchandise display and they are offered in a variety of styles: an eyelet version for attachment with a cable tie or lanyard; a non-adhesive design ideal for drop-in applications; and a high-bond adhesive version for protecting store assets.

Retailers of all sizes benefit from reliable EAS solutions to protect their inventory while preserving the bottom line. The scalability of the ADT solutions leads to the possibility to add video systems or intrusion and fire detection – always focused on the individual requirements and current demands.

* The Global Retail Theft Barometer is produced by the Centre for Retail Research an independent organization providing research and consultancy for the retail sector. Further information can be found at www.retailresearch.org.

Photos: Multi Development

► CONTACT

Heinz Kentrup
ADT Sensormatic, Ratingen, Germany
Tel.: +49 2102 7141 0
Fax: +49 2102 7141 100
hkentrup@tycoint.com
www.adt.com/global

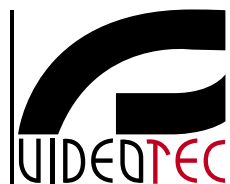


full internet control.

ULISSE NETWORK-CAM

The PTZ camera system for Network Cameras ideal for applications of video surveillance in external environments.

www.videotec.com



CCTV PRODUCTS
www.videotec.com



Electronic door cylinders secure access at this protected historical monument.



The new hotel is equipped with intelligent access control door fittings.

SECURITY FOR HOTELS

A Successful Symbiosis

Electronic Access in New and Historical Architecture

Built in the 18th century, the Château de Méry is not far from Paris. It offers a high-class venue for holding seminars and receptions and an additional new hotel was built on the 27-hectare park premises in 2010. Access organization in both buildings is controlled electronically by blueChip from Winkhaus.

The chateau and park compound in Méry-sur-Oise is only about thirty kilometers away from the French capital and is a protected monument, restored in the nineties. Since last year, the construction of a new hotel has complemented the facilities for sophisticated day-trippers and holiday visitors. The locking systems thus had high expectations to meet in terms of both function and aesthetics. The four-star hotel with ambitious architecture from Claude Ginsburger has seventy rooms, including two duplex suites with their own roof terraces.

Aesthetic Solution

The intelligent designer door fittings with electronic access control predominantly govern access in the new hotel building. An elegant

rosette-based fitting meets the very high design requirements and was developed in a cooperative effort between Winkhaus and renowned fittings manufacturer FSB. The doors' appearance is not interrupted by any protruding or attached components as the electronic reader can be discretely concealed in the rosette. The inconspicuous format of the compact electronic cylinder in the lock does not contrast with the appearance of the doors that are under historical protection and makes interventions in the historical substance during installation unnecessary.

Convenient Access

The hotel guests at the Château de Méry receive a blueChip card upon arrival. The card gives them touch-free access to all doors to which they are authorized by simply holding the card up to the rosette on the door. The hotel employees program the guest cards themselves at the reception desk. This works just as smoothly as the process of reading in the cards again upon checkout. The employees at the hotel and chateau are equipped with an electronic blueChip key. It can be used to open doors with electronic access control fittings as well as doors with cylinders. The key has a built-in transponder, which

is recognized by the access control fitting without touching it. The use of the key in electronic cylinders, on the other hand, is quite conventional in the historic chateau: insert, push and press the handle.

Easy Administration

"We handle the planning and installation of the system", reports Marco Wetten, sales director of Winkhaus' subsidiary F+W France. "The lock administration in the main computer controls it automatically once commissioning is complete." What would be a serious inconvenience with mechanical locking systems can be accomplished with a few clicks on the computer: if a guest reports that a card has been lost, the card will promptly be blocked in the computer. Employees' lost keys are blocked directly at the cylinder and locking rights can be administered just as easily. The company's blueIntras Control software helps in the process with its user-friendly interface.

► CONTACT

Winkhaus GmbH & Co.KG, Münster, Germany
Tel.: +49 251 4908 0 · Fax: +49 251 4908 145
www.winkhaus.de

The elegant access control reader is discretely concealed in the rosette.



The compact format is an ideal solution for historical doors.





BUYERS GUIDE **LEAD GENERATION**
EVENTS **REPORTS** **NETWORKING**
INDUSTRY NEWS **WEBINARS** **ONLINE-ARCHIVE**
TREND TOPICS
IT SECURITY SECURITY **FIRE PROTECTION** **SAFETY MANAGEMENT** **JOB**
WHITEPAPER **RSS FEED** **PRODUCT INFORMATIONS** **WEBCASTS**

GIT-SECURITY.COM

➤ **GIT SECURITY,**
the leading EMEA print and online media for safety and security

➤ In cooperation with **PRO-4-PRO.com** we present:

- **Buyers Guide**
- **Webcasts**
- **Webinars**
- **Jobs**
- **Online Surveys**
- **Newsletter**
- **Enhanced Search Functions**
- **English Language**

www.GIT-SECURITY.com





CCTV

Built for a Long Life of High Performance

A Tough Display Built to Execute Critical Tasks and Sustain Demanding Environments

With the emerging need for highly efficient security systems around the world, AG Neovo continues to provide solutions by developing tough displays built to withstand the critical tasks, such as those in large-scale government projects in the oil and gas, transportation and energy sectors. Fulfilling the mission of 24/7 operation is no problem for these meticulously-crafted displays.

Security and surveillance is one of the most demanding applications for display hardware, where monitors are put to the ultimate endurance test of non-stop operation, and any downtime for maintenance is unacceptable. For modern, high-end surveillance, even more advanced solutions are required to handle the precise and varying duties.

Outside relatively safe control rooms, surveillance displays for 24/7 utilization are often needed in more unreliable semi-outdoor environments, in which the durability of a product determines its lifespan on the job. Surveillance displays are seen in a wide range of settings, including those where extreme weather conditions can be incessantly taxing on hardware while it performs its already demanding tasks.

Likewise, there are numerous other challenging settings that require displays with the endurance, durability and adaptability to face uncertain situations. In public, multi-user environments like commuter trains, thousands of people can be in contact with a single monitor during the span of a day and screens would normally be susceptible to damage and scratches. In busy workplaces – the food manufacturing

industry or advanced medical establishments – accidental impacts are not an uncommon occurrence as displays must be in clear view.

All-around Durability

Providing real solutions for the high demands of such difficult environments, AG Neovo redefines the traditional concept of the monitor through advanced technological functions, manufacturing adaptability, and progressive, energy-efficient design. AG Neovo's proprietary NeoV Optical Glass – specifically designed for public and exposed multi-user environments – prevents damage from high impact, moisture, dust and scratches, and reduces eye fatigue by absorbing ambient light and minimizing reflection. As so, it has become the industry's most trusted hard glass technology.

The sturdy metal housing used for AG Neovo displays make them an excellent choice for security administrators and technicians who invariably need to install their equipment in tough, uncompromising environments. The accurately constructed casings keep out unwanted moisture and dust, and prevent damage from incidental impacts – all the while providing stylish

aesthetics to match their professionally designed state-of-the-art surroundings.

No Image Sticking for Prolonged Life

When round-the-clock operation is imperative to the job and fixed screen images are displayed for too long, monitors are normally subject to the negative effects of "image sticking", in which the liquid crystal material contained within the TFT LCD panel becomes polarized. Understanding this, AG Neovo has developed the Anti-Burnin technology to tackle the undesired yet common phenomenon. Displays designed and tested for security and surveillance are all equipped with this technology, allowing for a prolonged, economic, energy efficient and maintenance-free life.

Image Clarity and Flexible Viewer Options

To provide superior clarity in image quality and flexible viewer options required for precise and challenging applications, AG Neovo has developed Advanced Image Platform image processing, which features two innovative technologies: the Built-in Image Enhancer reduces noise, blurring, flickering and other signal instabilities and the Smart Omni Viewer brings multipoint viewing, one-click switching, on-screen freezing, and 180° image rotation for inverted display installation.

Serious Solutions for Tough Problems

All around the world, from professional security operations to busy public transportation stations to private ultra-modern fishing vessels, AG Neovo continues to provide tough superior displays to satisfied customers. In 2010, more than 2000 AG Neovo X-Series widescreen displays were installed to assist with the highly demanding Arabic Desert Oil Project, which operates in one of the harshest environments in the world, subject to severe weather conditions such as relentless temperature swings and sandstorms. In 2009, ten AG Neovo SX-Series displays were installed in the advanced fishing vessels, The Pleiades BF-155. The vessel's control room needed a slim, space-conscious display solution

to endure the below-zero temperatures, high humidity and salty air of northern Scotland. Throughout the Arlanda Express high-speed commuter train in Sweden, a busy public environment with uncertain occurrences, AG Neovo X-Series displays continue to safely provide travel information and entertain thousands of passengers a day and provide an attractive compliment to the trains stylish interior. In January of this year, the Taiwan Railway Administration in Asia started using 42" RX-Series displays to provide travel information to com-

muters in high-traffic public areas. The administration is now looking to implement many more AG Neovo products across the island because of their impressive track record and innovative features.

The structural durability that is vital to withstand relentlessly severe conditions and the adaptability needed for customized environment-specific applications can be found in AG Neovo's exceptional products. For quality control, every display goes through a painstaking manufacturing process: determining the specifications of the

required frame, carefully selecting the materials and components and testing the durability of the structure.

Ifsec · Hall 5 · Stand C82

▶ CONTACT

AG Neovo · Global Marketing
marketing@agneovo.com
www.agneovo.com



Turn night into day!

Network-ready thermal imaging cameras for security applications

Thermal imaging cameras create a virtual security fence. Nuclear plants, petrochemical installations, warehouses, ports and airports, they are all vulnerable to theft or even worse terrorist attacks, and can be protected by thermal imaging cameras. Thermal imagers can detect potential threats for assets and personnel in total darkness, in all weather conditions. You can spot intruders, without being seen yourself.

FLIR Systems offers a full range of thermal imaging cameras for industrial security and surveillance applications.

Whatever your needs, FLIR Systems offers you the perfect solution.

Some of our cameras are fixed mount, others are integrated on a robust Pan/Tilt mechanism to further increase situational awareness. Multi-Sensor systems combining a thermal imaging camera and a daylight/low light camera are also available.

FLIR offers a wide variety of choice with regard to lenses and image resolution. Cameras can be installed either in an analog or TCP/IP network.

For more information about thermal imaging cameras, please contact:

FLIR Commercial Systems
2 Kings Hill Avenue - Kings Hill
West Malling
Kent
ME19 4AQ
Phone: +44 (0) 1732 221 244
Fax: +44 (0)1732 843 707
E-mail: flir@flir.com

www.flir.com

1950

1953

Messrs. Grundig present the first industrial TV installation on the "Funkausstellung" in Düsseldorf.

1960

1958

The first public video surveillance installation in Germany is installed in Munich.

1966

Invention of the CCD chips; first deployment in video cameras in 1970.

1970

1972

For the first time, a CCD chip is able to provide a resolution of 100 x 100 pixels.

1980

1981

The first color camera by Sony.

CCTV

An Improved View through the Ages

How CCTV Systems Have Developed Since Their Invention

We often say that things were better before. While there are many situations in everyday life where this rings true, it certainly does not apply to CCTV surveillance systems. A trip through time, starting from around 1950, shows us just how significant the various technical developments have been in creating the equipment we know today that delivers us crystal clear images from afar.

The booming industrial years of the 50s produced a need for video surveillance, first of all to observe production processes. Early attempts to use television cameras were not successful because of the type of tubes that they used. The introduction of the vidicon tube however changed that and the first industrial television system was introduced by Grundig in 1953. Munich was the site of the first public surveillance system in 1958 and by the end of the year there were already some 250 systems in operation.

Cameras those days were at least the size of a very large cigar box, had three vidicon tubes and were connected to a controller via a cable with 26 control wires and 2 coax lines. The controller itself had the dimensions of a small traveling case and needed two heavy power supplies to support the more than 30 tubes that it contained.

First transistors and discrete devices and now SMD components together with totally new methods of capturing images onto chips have thankfully brought the size of cameras down continuously over the years. They are now at a point where the case size presents no problems and the concentration is on improving image quality as well as building a certain level of intelligence into the unit.

Sony kicked off the digital age with the introduction of their digital color camera in 1981. From that point on, a continuous and rapid size reduction of CCD chips helped to improve picture resolution, increase light sensitivity and reduce size. The 720 x 576 pixel 4:3 PAL format

became the standard for CCTV images. Although mocked by some at the time because of the very limited storage capacity, the first digital hard disk recorder – recording uncompressed images – appeared as long ago as 1992. The advent of larger hard disks and ever more ingenious compression methods make the whole process seem easy nowadays. Where would we today be without DVRs?

The Wider Picture

The evolution and widespread introduction of high definition (HD) in the consumer TV world has now brought operational advantages for CCTV systems. Firstly the 16:9 image ratio presents the viewer with a larger observed area which formerly would have needed either two cameras or a continuous pan movement to cover. This will reduce the final number of cameras necessary when planning area surveillance for a new installation, and could also bring advantages to existing CCTV systems by widening the coverage and minimizing blind spots. Monitors



1920 x 1080 resolution HD CCTV camera covers wide area in high definition



720 x 576 CCTV camera only shows small area in same detail

80

1990

2000

2010

First digital colour
camera is developed
by...

The first digital hard-
disk recorder is
presented on the
"Security" trade show.

In Taipei, Taiwan, the
company EverFocus
Electronics Corporation
is founded.

On the "Security"
trade show, EverFocus
presents the "Black
Diamond" EDR 1600.

EverFocus announces
the launch of the
first complete
H D - C C T V
- Video over Coax -
product series
worldwide.

graphic design: Corinna Ortmann



EQH5200 – 2 Megapixel Full HD CCTV camera



EPHD081 – 8-channel HD-CCTV DVR

for the control room in this format and in high definition are already freely available.

The second inherent advantage is contained in the name; high definition means that the delivered image with a resolution of 1920 x 1080 pixels can be enlarged much more than from a standard definition camera (D1) without loss of clarity. The potential of a HD camera to still deliver sharp images when fully zoomed in on a distant object presents the operators with new surveillance abilities. Not only is the physically surveyed area enlarged but the definition within that wider area is also greatly improved, significantly enhancing recognition capability. The Everfocus EQH 5200 is a HD day/night camera with an automatic swiveling IR cut filter that transmits 1920 x 1080 video over coax in real time and thereby matches the 2 megapixel resolution of the IP world.

Coax Runs

System planners will probably already be thinking about the alterations that will be necessary to the network in order to support the large amount of data that will be coming from each camera. Surprisingly, it could be that no alterations will be required at all if there are existing co-ax lines in place. The Everfocus HD CCTV technology uses conventional 75Ω cable as found worldwide in many surveillance installations.

RG-59 cable is adequate for distances up to 100m and low-loss types can be used to reach up to 250m from the control room. The potential re-use of existing cable runs can signifi-

cantly reduce the cost of network infrastructure compared to a megapixel IP system, and no additional load is placed on an in-house structured cabling system that primarily serves other functions. Where still longer distances need to be spanned the EHA-RPT data repeater and distributor will provide another 100 meters range and allows the signal to be split off to another HD device at that point.

Replay

Of course, having sharp live pictures is very beneficial, but these should be recorded for later evaluation if the system is to be really effective. The EPHD08 recorder takes the streams from up to 8 connected cameras either at full resolution (1920 x 1080) at 12.5 ips or in real-time (25 ips) at 1280 x 720 resolution. With an 8TB hard disk, this allows a continuous recording time of more than a week. If additional techniques such as motion detection or contacts are applied – and possibly also a reduced image rate – the recording time can be extended to several months.

The unit's dual output stream capability enables network access to the cameras, both in full HD resolution and with reduced resolution for low-bandwidth networks and DSL connections. This function can be beneficial, for example, for continuous transmission of video material to remote central control sites. When a few moments of interesting recording has been identified, this can be replayed over the network at full definition. Operation of the unit is via the same intuitive graphical display that is found in the company's Paragon and Ecor series DVRs.

Soft Support

The megapixel over co-ax technology used does not mean the creation of an island system that is independent of other video surveillance technologies. The Powercon software enables seamless integration of an Everfocus system into existing analog and IP systems, enabling system expansion at HD definition without cutting back on overall functionality.

This effectively enables extended surveillance into areas outside a physically secured compound, for example in sensitive industrial and state premises, where IP solutions would not be permitted for reasons of network security and potential unauthorized access to the IP network structure. While almost every article currently written in the CCTV world centers around IP network cameras, there is definitely a lot of life left in direct coax transmission, now in high definition. The simplicity of installation, the near zero-latency image delivery and, in the case of upgrading an existing surveillance system, significant cost savings by utilizing an existing infrastructure are all good reasons not to immediately jump on the bandwagon without first looking at the alternatives.

Ifsec · Hall 5 · Stand B5

▶ CONTACT



EverFocus Electronics AG, Emmerich, Germany
Tel.: +49 2822 9394 101 · Fax: +49 2822 9394 995
info@everfocus.de · www.everfocus.de

CCTV

Pick a Pixel

The Small Difference on the Way from Light to a Signal



Dr. Joachim Linkemann

CMOS area scan sensor

Historically seen, CCD (Charged Coupled Device) sensors have been around for a long time, namely for over 40 years, whereas CMOS sensors are comparatively young. Both technologies are used in cameras as the landing platform for incoming photons and produce sharp images. Dr. Joachim Linkemann discusses the pros and cons of these two light-converting devices.

Continuous improvement and optimization over the years has given today's CCD sensors an excellent picture quality. In 2009 the American scientists Willard Boyle and George E. Smith were awarded the Nobel Prize for Physics for their invention of the CCD sensor. Originally developed in 1969 for data storage, the potential of the Charge Coupled Device as a light-sensitive sensor quickly became apparent. It was around 1975 when the first sensors with sufficient resolution were used for TV cameras. More than ten years were needed however until the process

technology was developed for the manufacture of CMOS (Complementary Metal Oxide Semiconductor) sensors. The first commercially successful CMOS sensors appeared on the market around the middle of the 90s.

The More Sensitive, the Better

CMOS sensors are based on the same physical effect as CCD sensors; using the photoelectric effect, incoming photons cause electrons to be emitted. Depending on how the sensor is constructed, the maximum sensitivity of the CMOS sensor lies in the red spectral area (650–700 nm), whereas, not least because of the numerous technical improvements made during the long development phase, CCD sensors have their maximum at 550 nm – that is, exactly where the human eye is most sensitive.

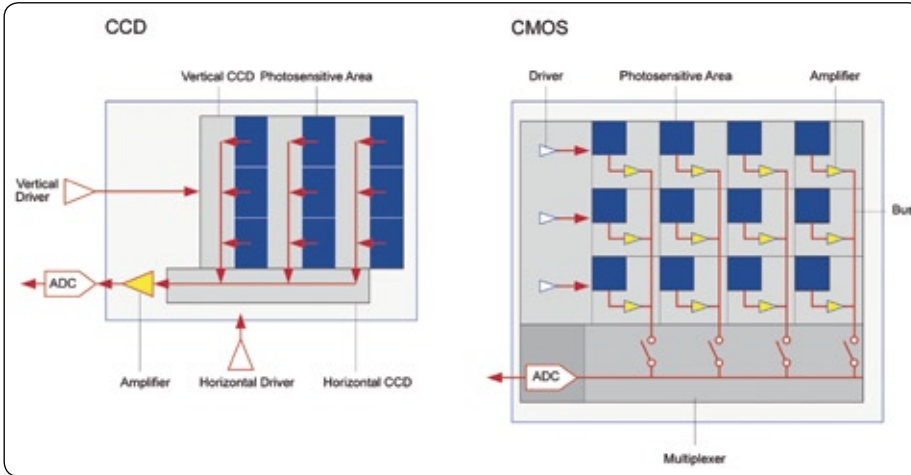
In the past, CMOS sensors were significantly less efficient in their conversion of incoming light. That was due to technological reasons: the light-sensitive area of a CMOS sensor was only a small part of the whole area within each pixel because the electronics necessary to read each pixel and was built into the same area of the chip took up a relatively large space. In a CCD chip this is different. Here the electronics for the evaluation of the charge pattern from the sensor

surface is outside the chip so that almost the entire chip surface is available as a light-sensitive area. Meanwhile further developments such as micro lens arrays that are fitted to the chip mean that CMOS sensors have nowadays reached a similar high sensitivity as CCD sensors.

The Price of Individuality

One set of electronics for all pixels – which for a CCD sensor sounds like a compromise in terms of the processing speed – is really an advantage for the picture characteristics. Having just one processing circuit for a large part, if not all, of the CCD chip means that all pixels are sampled and converted to signals in the same way.

CMOS chips that carry electronics for each pixel on board are different. Thanks to this structure they can be more quickly read and the picture area can be more flexibly addressed. However, although the amplifier curves are almost identical, the tiny manufacturing tolerances between the numerous individual amplifier structures on the CMOS sensor cause the offset of each pixel to be different – compared to a CCD chip up to ten times larger. On the whole then, this offset causes difficulties with regard to the sensitivity level of the sensors. The CMOS sensor performs differently than a CCD sensor in par-



CMOS vs. CCD



Leading camera manufacturers such as Basler have both sensor technologies in their portfolio

particular when the first signal should be visible out of the noise. By definition, this level is reached at the latest when the signal is as high as the noise (signal-to-noise ratio (SNR) = 1). A technical measurement that describes this characteristic quantitatively is the Fixed Pattern Noise (FPN). CMOS sensors have a higher Fixed Pattern Noise (FPN) as CCD sensors.

Lower Sensitivity but Lots of Space for Electrons

But CMOS sensors can have advantages in other aspects: CMOS sensors can have a higher Full-Well-Capacity. The Full-Well-Capacity is the maximum number of electrons per pixel. This is often artificially limited to a reduced saturation capacity. This means that the light-sensitive structure of each and every pixel has more space to store electrons. As electrons are generated by light however, the CMOS sensor can handle more light. The relationship of saturation capacity (or Full-Well-Capacity) to sensitivity level is the dynamic range that the sensor can cover. With regard to the dynamics therefore, it could be said that what the CMOS loses in sensitivity level compared to a CCD sensor it makes good with its saturation capacity. So CMOS and CCD are directly comparable with regard to dynamic range.

The operational characteristics of the sensors, in particular with CMOS sensors, is altered by special processes and adapted to the perception of the human eye. The sensitivity of the camera is thereby altered from a linear to a logarithmic curve and a dynamic range of over 100 dB is attained. However, this alteration causes dark regions of the image to be differentiated more exactly as light regions. The maximum signal-noise ratio is in principle equal to the root of the saturation capacity. The CMOS sensor also leads here, although it needs more light. As a simple rule of thumb one can say that CCD sensors are preferred for applications with low light, CMOS sensors have advantages when plenty of light is available.

When It's too Bright for Sensors

However, a different set of problems occurs where there is a lot of light: If a CCD pixel is too brightly illuminated the excess electrons will 'spill over' onto the neighboring pixel. This effect is appropriately called 'blooming'. This problem should not occur with CMOS sensors. Very bright objects cause charges to accumulate during the transportation process in the CCD sensor, and these accumulated charges result in bright stripes in the image. White areas then



blueChip timeLine
Electronic access control for the future.



- + Key-activated
- + Localised, time-limited access authorisation
- + Fast, inexpensive upgrades and modifications
- + Maximum convenience, minimum effort

appear as blurred stripes in the picture. This can be observed for example when at night a car's headlamps cross the image. This effect is called 'smearing'. The CMOS sensor also wins against the CCD in such situations, as they do not suffer from smearing. Therefore CMOS cameras are predominantly used outside.

Bad Habits and How They Are Cured

Some conventional cameras with CMOS sensors have a rolling shutter for technical and cost reasons. The difference between a global shutter and a rolling shutter is that for cameras with a global shutter the illumination of all pixels begins and ends at the same time. Cameras with a rolling shutter capture an image line by line (or, depending on the sensor, column for column). With this technique, artifacts can occur with very fast moving objects. Such artifacts are undesirable, for example in intelligent traffic control systems.

Other technical shortcomings of CMOS sensors can meanwhile be compensated for within the camera. These include irregularities such as can occur during the conversion of charges into a gray value (ADC disparity) or those that arise from the manufacturing tolerances of the many evaluation structures in a CMOS sensor (Dark

Signal Non-Uniformity, abbreviated to DSNU and Photo Response Non-Uniformity, abbreviated to PRNU). Equally it is possible to correct for defective pixels through interpolation. Irregularities in a CCD can also be corrected. If for example a CCD sensor is read out in two separate half-pictures to increase the read speed, the two halves can demonstrate different offsets or amplifier characteristics. The Tap-Balancing of these CCD sensors has meanwhile become standard in modern cameras, albeit in differing quality.

Spoilt for Choice

CMOS sensors have a newer evolutionary history than CCD sensors, but they are also technically fully mature products meanwhile and for some applications represent the better alternative. Even innovations such as back side illumination (BSI) that was first introduced for CCD sensors is now taking hold in the CMOS world. Using this technique, the light-sensitive area of each pixel is enlarged, as the pixel area is no longer blocked by components. When you have to make a choice for a specific application, many of the aspects mentioned above will play a role in the decision. However, the details will decide which of the two sensor technologies is the right one to solve your particular problem.

Ifsec · Hall 4 · Stand E104

▶ CONTACT

Dr. Joachim Linkemann
 Basler AG, Ahrensburg, Germany
 Tel.: +49 4102 4630 · Fax: +49 4102 463109
 info@baslerweb.com · www.basler-ipcam.com

TRANSPORT SECURITY

EXPO & CONFERENCE

Securing Passengers and Cargo Worldwide

- Focused exhibition
- High level international conferences
- Live product demonstrations
- Free-to-attend workshops
- Networking functions

Aviation
Cargo
Maritime
Supply Chain

For more information please call Adam Smith on +44 (0) 208 542 9090 or email asmith@niche-events.com

www.transec.com 13-14 September 2011 | Olympia, London

Command and Control



Genetec has introduced its map-based command and control feature, Plan Manager. It extends the company's concept of traditional graphical maps and provides operators with an interactive and efficient tool to help manage their security environment. The feature is offered to customers as an add-on module within Omnicast, the company's video surveillance system. It allows operators to create and integrate maps of their unique environments into their video surveillance system. Then, users can instantly access and manipulate various graphical entities on the map such as hot spots (pre-defined high-security zones), map links (links to different points between floor plans or within the same floor plan), favorite views, cameras and other solutions.

www.genetec.com

IFsec · Hall 4 · Stand C30

A New Generation



Geutebruck's "+" generation of business enterprise systems use Omnibrid technology to support all current compression algorithms and standards – H.264, H264CCTV, MPEG4CCTV, M-JPEG and ONVIF compliance – as well as audio recording, for analog and IP cameras. With the latest Windows 7 embedded operating system, and many new features in the GSC-View display software, the new generation of Geviscope and Reporter products offers intuitive user interfaces, additional functionality and full compatibility with existing systems. Owing to its flexible and sophisticated client/server architecture and the variety of integrated video analysis options, this generation offers solutions for every need – from a simple video security application for a high street bank, to highly complex networked digital matrix systems for prisons and government sites. For high security environments, customized modular server solutions using Geviscope management software offer digital video recording with up to 99.9% availability. For efficient system load balancing, computing-intensive video analysis processes can be transferred to external high performance platforms without any effect on recording or live viewing.

info@geutebruck.com

www.GIT-SECURITY.com

Access Control Product Award



IEE was honored with the Best Access Control Product Award for its Tailgate Detector TD Flex, an access control solution based on 3D technology. It was selected from a group of nine access control products representing some of the best new products introduced over the past year. The judges were particularly impressed by the reliability of the anti-tailgating features offered by the system, as well as the customizable nature of the detection strategy settings, which can be selected by the customer and which range from high security (allowing no crowding in the detection area), to high throughput (for high-traffic locations). Typically mounted above secured access points such as doors and turnstiles, the product is integrated into existing infrastructure, and provides an additional security layer to access control systems.

sara.nobels-freeman@iee.lu

IFsec · Hall 4 · Stand B150

Explosives Trace Detection System Approved



The United Kingdom Department for Transport (DfT) has approved L-3 Security & Detection Systems' Optex explosives trace detection (ETD) system for use in U.K. transportation security applications. The system is based on the company's energetic materials detection (EMD) technology, which uses thermal signatures to detect trace levels of explosives from the surfaces of objects, vehicles or people in order to indicate a potential explosives threat. It is in use at more than a dozen Australian airports and has been deployed in Asia, the Middle East and the Americas for transportation security, law enforcement, and military and commercial applications. Company president Thomas M. Ripp: "Featuring leading-edge EMD technology with inherent advantages over conventional trace detection systems, our Optex offers faster throughput, higher system availability and lower operating costs."

www.L-3com.com

My Access to my Business.



LEGIC advant[®] 4000

- Reader chip series
- Multi standard
- Low power
- Upgradable

NEW

Any service I can imagine, any security level I desire.

All on one chip. On the credential of my choice.

Contactless smart card technology: www.legic.com

LEGIC[®]
innovation in ID technology

Visit us at IFSEC in Birmingham in hall 4, booth B75

**APPLY
NOW**

**CLOSING DATE
JULY 11TH 2011**

**GIT
SECURITY
AWARD
2012**

GIT VERLAG
A Wiley Company

The Categories

- A – Safe Automation
- B – Fire Protection
- C – CCTV
- D – Access Control, Intruder Alarm,
Perimeter Protection
- E – Industrial Safety

Enter the product description and upload
the product photo to:

www.PRO-4-PRO.com/go/GSA2012

ZVEI:
Automation

ZVEI:
Sicherheitssysteme

TUV
NORD
SÜD

VDMA

BHE

GIT VERLAG
A Wiley Company



Assisting Signal Transmission from Network Cameras

Abus Security-Center has introduced two new transmission sets for the transmission of network data using conventional coaxial or dual-wire cables. Time and money can be saved during installation, as it is no longer necessary to lay expensive network cables. Compared to network cables, they also have considerably greater range of up to 1,500 metres. The IP via coaxial transmission set TVAC25100 and the IP via dual-wire transmission set TVAC25110 enable the use of existing coaxial or dual-wire cables for the transmission of IP video signals. The transmission sets guarantee high bandwidth – of up to 94 megabytes per second over 200 metres – and delay-free, real-time video transmission.



info.de@abus-sc.com

Terabyte Storage Network Video Recorder



Plustek has announced its Linux embedded standalone NVR with dual gigabit LAN data transport. The NVR4300 supports a wide variety of cameras, enabling users to select the right product for local conditions. The machine is equipped with a HDD of 320G – 1TB and the choice of H.264, MPEG4 and M-JPEG compression technology provides storage as required. After prioritizing different monitoring areas, definition quality can be selected for each area. The DVR-II video server allows existing CCTV structure to remain while migrating to a NDVR, easing development and saving cabling cost. Multi Manager backend software connects to the entire Plustek product range and manages up to 128 cameras.

marco.kraemer@plustek.de

Enhanced Image Quality



Siquira's latest cameras will use the Seawolf image sensor from Pixim. The Seawolf imagers are chosen for their very good image control, performance in extreme lighting and low-light conditions, and 690 HTVL effective resolution. Using the traditional box-style housing, the Siquira BC14 contains some of the most advanced technology available. Its Seawolf image sensor uses Pixim's Digital Pixel System technology, which processes each pixel individually, endowing this camera with top-of-the-line wide dynamic range (WDR) capability as well as 690 HTVL effective resolution.

www.pixim.com

www.GIT-SECURITY.com

Video, Alarm & Mechatronics

Abus Security-Center presents its video, alarm & mechatronics catalogue. In just under 200 pages, the catalogue features over 40 new innovations, with all segments



focusing particularly on security via IP technology and the combination of technologies. These innovations are particularly useful for private households and small/medium-sized businesses. The catalogue is divided into sections on network cameras, analogue cameras, recording systems, accessories, wired and hybrid alarm systems, wireless alarm systems and alarms. Highlights include a brand new range of analogue and IP dome cameras, the Secvest IP network-based wireless alarm system and many new mechatronic wireless alarms for use with all the manufacturer's wireless and hybrid alarm systems.

p.wanner@abus-sc.com

Video Analytics

Safezone, Keeneo's video analytics software for security, is now available with its fourth generation software, revision 4.0, featuring more security scenarios, even better detection, false alarm prevention and PC and camera compatibility updates. The software enables a video analytics that is easy and quick to configure either remotely or on-site, has no hidden costs to install as it comes with all features and is very accurate. Improvements also include software that further reduces false alarms from environment factors while increasing its accuracy and reliability from its detection refinements. These refinements include object classification and detecting people running, crawling or crouching. Improved vehicle detection scenarios are also included in this release. The detection of violations has enhanced graphics using a red bounding box in the video image. The software is now Windows 7 and Server 2008 compatible.

www.keeneo.com

Reference Designs

Pixim announced the release of three camera module reference designs based on its new Seawolf chip. The three sizes, 32 x 32 mm, 38 x 38 mm, and 42 x 42 mm, allow customers to easily and quickly support all of the camera module form factors used in high-volume security cameras. Through Seawolf, the reference designs offer 690 HTVL effective resolution as well as the wide dynamic range. In addition, they require just 0.1 lux of illumination to produce usable, color images at 30 frames per second. The camera modules utilize the Piximate companion chip from Kiwi Semiconductor that integrates the functionality of five active components and their associated passive devices into a single chip, reducing bill-of-materials (BOM) cost and simplifying sourcing and inventory management. The reference designs have been produced to fit within a wide variety of camera housings and applications. They include hole patterns for common lens mounts as well as for attaching to standard camera gimbals and housings.

www.pixim.com



Visit NEDAP at IFSEC 2011
Stand 4/B65 NEC Birmingham
16 – 19 May 2011

unlimited

For companies with a large security system it is important to be sure of unlimited growth, both in size and functionality. Nedap AEOS is the only system in the market that offers unlimited possibilities concerning the number of doors, sites, security levels, carriers and functionality.



For more information: Nedap Security Management
+31 (0)544 471 111 - info@nedap-securitymanagement.com
www.nedap-securitymanagement.com

CCTV / POWERPLANTS

Sunshine Secured

Addressing Security at Photovoltaic Power Plants

Photovoltaic plants are steadily gaining popularity as an environmentally friendly means to generate power. One related question is how the vast outdoor installations can be protected against theft, unauthorized access and vandalism. Dallmeier has developed an intelligent and efficient surveillance concept which is already in use across a number of photovoltaic plants in the Czech Republic.

Photovoltaic means the direct conversion of sunlight into electrical power through so-called solar cells. A heightened environmental awareness and financial assistance by the government for renewable energy projects has led to the construction of numerous photovoltaic plants. Reliable protection of the usually vast areas against theft or sabotage is not only in the interest of the operators. In the Czech Republic, security systems are also demanded by insurance companies and investors. The requirements for video surveillance and analysis are clearly defined: the system is meant to reliably raise an alarm if an unauthorized person should attempt to access the area. At the same time false alarms triggered, for example, by weather effects or animals should be reduced to a minimum.

Regensburg based CCTV/IP experts Dallmeier collaborated with their local partner, NSN CS, to

develop a high-performance video surveillance system for a photovoltaic plant in the south of the Czech Republic. An intelligent video analysis system, namely the DVS 1600, ensures reliable perimeter protection and automatically displays the images to operators in a security room. However, the solution offers another decisive advantage: the power consumption of the surveillance system has been significantly reduced by using thermal imaging cameras, increasing the efficiency factor of the photovoltaic plant.

Hynek Matocha, Technical Manager at NSN CS, explains: "The operators of the photovoltaic plant had informed themselves thoroughly about CCTV systems in solar plants. Usually, cameras with infra-red lighting are used in order to get usable image material at night. However, the high energy requirements of that concept and the rapid wear and tear of individual components pose a problem. Therefore, our two companies developed a new, more efficient and more reliable surveillance concept."

Low Power Thermal Imaging Cameras

In contrast to other current concepts, the new system uses thermographic cameras instead of cameras with additional infra-red light. The smart idea was devised by Abbas, Dallmeier's local distributor in the Czech Republic. The Flir cameras do not need any light at all and produce high-quality thermal images during daylight as well as in complete darkness, in contrast to other night vision systems which require residual light to produce images. Thus, additional infra-red lighting is no longer neces-



The video surveillance camera images are recorded onto a Dallmeier DVS 1600.

sary and the operating costs of the video system are significantly lower, which means that, despite the higher acquisition costs of the thermal imaging cameras, the investment quickly pays off.

Valid Alarms

The camera images are recorded and intelligently analyzed on a Dallmeier DVS 1600. The Czech photovoltaic plant uses the "Intruder" analysis in order to immediately detect unauthorized access. Hynek Matocha explains the reasons: „The plants are often installed in remote areas where thieves can go unnoticed while dismantling entire modules. Usually the thieves break through the fence or the entrance gates using trucks. Unfortunately sabotage is a problem too. Some people attempt to climb over the fence and then willfully damage the valuable installation.“ Matocha is more than happy with the results of the new video system. „The system reliably triggers alarms if unauthorized persons attempt to access the premises. At the same time, the number of false alarms is nominal“, he says.

During video analysis, the DVS 1600 detects the movement in a given video sequence. The moving objects can be persons and vehicles but also branches, grass, animals or shadows. The detected objects are subjected to a comprehensive validity check in order to minimize the number of false alarms. Decisive criteria for the check are, for instance, the size and the direction of movement of an object.

If an object fits the alarm grid, two important steps are initiated. In a first step, the alarm triggers recording at the DVS 1600. The video server stores for an adjustable time period prior to and after the alarm and associates the alarm with the corresponding image. The whole event is saved in a database and can be investigated at any time. The second step is automatically forwarding the event to the security center where the alarms can be quickly verified and further action initiated if necessary. „We are currently considering the possibility to address intruders via speakers from the security center in order to limit the damage“ Matocha says. "That is another interesting option that Dallmeier proposed to us."

Easy Configuration

Hynek Matocha is particularly excited about the easy operation of the recorder: „People always think that installing and configuring a sophisticated video analysis system is a highly complicated job. That is totally different with this new device. It is easy to see that the manufacturers have put special emphasis on an intuitive user concept.“ A wizard was developed that guides the user step by step through the individual steps of configuration. "All steps are easily understandable and are also explained with online help, so configuration is really simple. The wizard also makes sure that no important steps are forgotten", says Matocha.



The Dallmeier surveillance concept has been proven successful in practice.

Remote Image Transmission

Photovoltaic plants are often built in remote areas where high-bandwidth networks are not usually available. Nevertheless, it must be ensured that the images from the video system are transmitted to the security center reliably and in good quality. Dallmeier has developed a special transmission method called Premote to meet those kinds of requirements. The particular codec is optimized for low bandwidths, enabling fast image transmission even at low bit rates. In contrast to other low-bandwidth transmission techniques such as Dual Streaming, this system allows not only transmission of live images but also of recorded footage. A multisplit is also possible. Roman Pernica from OP Security, the man responsible for technical operations at the security center, explains: „The performance of Premote is simply convincing. One decisive advantage is the short transmission delay for the control signals to reach the pan/tilt/zoom cameras. Hence, PTZ cameras can also be controlled manually via networks with low bandwidths.

The surveillance concept by Dallmeier has proven itself in practice so well that further projects are already planned. Hynek Matocha explains: "The operator of the photovoltaic plant is highly satisfied with the new surveillance system. We are already in the process of equipping other plants with similar technology."

Ifsec · Hall 4 · Stand D80

▶ CONTACT



Dallmeier electronic GmbH & Co. KG,
Regensburg, Germany
Tel.: +49 941 8700 0 · Fax: +49 941 8700 180
info@dallmeier.com · www.dallmeier.com

THE BEAUTY OF A KEYLESS WORLD.



Digital SmartHandle 3062.

Our digital SmartHandle 3062 has won the red dot design award. The technology is impressive too. It offers a long battery service life, can be networked directly and features a special highlight – snap-in installation. Simply attach the escutcheon to the door leaf, tighten the screw, and you're done! Typically SimonsVoss.

Phone: +49 89 99228-0
www.simons-voss.com
www.facebook.com/SimonsVoss.AG

SECURITY FOR HOTELS

Towards an "Intelligent Response" to Hotel Safety

Benefits of Integrated, Total Building Solutions

As with any other business, hotel owners, operators and licensees have a duty of care with regards to the health and safety of their customers and staff. When it comes to ensuring people safety, challenges undoubtedly arise, but for hotels, particularly global chains, the very nature of the business, its operational workflows and industry ownership structure, creates a dilemma which, in many cases, will result in only the basic fire safety requirements being implemented. The problem here lies with the fact that not only are guest expectations changing in this field but also past events have shown the limitations of a "prescriptive-only" fire safety approach.

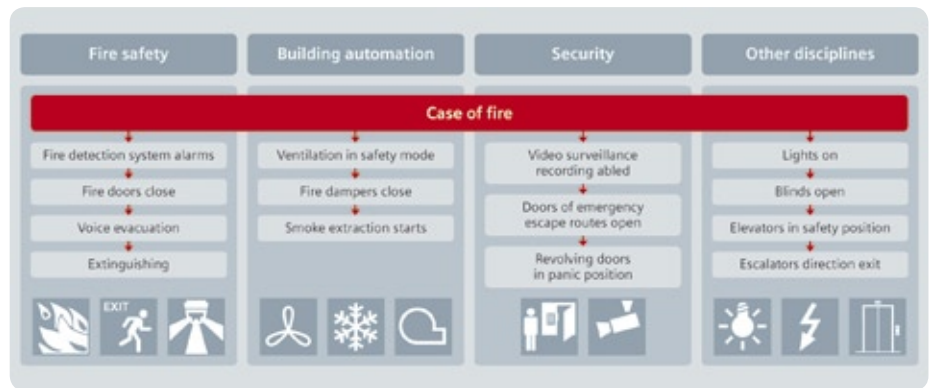
A couple of headline statistics demonstrate that fire safety needs to be higher on the agenda of hotels. Over the last 10 years, 217 guests have died and 361 have been injured in hotel fires (Source: Source: Studies Building Technologies; SAG).

Extensive and high profile media coverage of some of these events has contributed to making hotel guests more aware of safety issues, so the active promotion of sound safety measures and records will increasingly be a decisive competitive advantage. The fact that almost 25 percent of all travel managers will book only those hotels that meet high safety standards is here a revealing statistic (Source: Association of Corporate Travel Executives). However, despite this, the investment made by hotels in fire safety tends often only to meet the basic requirements driven by national laws. But when you consider the implications for an international chain's brand and image in the event of a serious incident, ensuring consistent levels of protection for guests, as well as staff, across the portfolio of hotels needs to be a fundamental consideration. All major hotel brands have addressed this need by developing their own safety and security standards. Yet the fact that requirements for the implementation, use and maintenance of fire safety systems are stipulated by the national regulatory authorities makes adopting worldwide policies difficult. This is exacerbated by the sometimes conflicting interests of hotel owners, operators and licensees, and the investment choices they have to make to sustain their business and competitiveness – it often comes down to "choosing" between improving guest services or improving safety beyond the minimum legal requirements with performance based systems. Add to this the specific fire safety challenges of a hotel, including minimizing the considerable inconvenience of false alarms, and it is clear that this is a market sector which can prove complex.

Overing the "Basics"

Prevention is always the best approach. This ranges from ensuring adequate safety detection systems in public areas, back of house and guest rooms to reducing the risks of electrical faults that could lead to fires, or integrating safety measures in work processes in risk areas, such as the kitchen. This is where voluntary schemes, such as that developed by HOTREC, the trade association of hotels in the EU, can prove very useful. In February 2010 HOTREC introduced "Hotel Fire Safety MBS-Management, Building and Systems- Methodology". This is a flexible scheme for fire safety which is designed to offer a set of guidelines through which a high level of fire prevention can be achieved, whatever the prevailing national or local legislation.

But prevention also includes ensuring that no false alarms occur. These are not only disruptive to guests (unnecessary evacuation in the middle of the night will undoubtedly lead to irate guests) and business activities, but they can also



Intelligent evacuation with integrated fire safety, building automation, security and other disciplines
(Copyright: Siemens Building Technologies, Total Building Solutions)

create indifference that could have significant repercussions should a real alarm situation occur. So detection needs to be reliable, accurate and timely. The intelligence of the fire or security systems will play a vital role here – from ensuring a smouldering fire in the kitchen or a guest room is immediately detected to preventing steam from showers triggering false alarms. The different areas, their occupancy patterns, the fire risks and types associated with their use – all should contribute to the design and implementation of efficient safety systems, with detection technologies that can cope with the versatile environments of a hotel.

A lot of emphasis is, quite rightly, put on incident prevention, detection and alarming systems – by regulations as well as by hotels themselves. Whilst this is, of course, fundamental, studies of past fire events show that what happens after an alarm requires more focus, and, in particular, the fact that many people hardly react at all to conventional signals such as horns or sirens. Many assume that it is a test or a false alarm, while others simply do not know what to do. What this means is that, to ensure efficient incident management and evacuation, there is a need to leave the regulated fire safety technology arena and look towards performance based-systems, systems that can address the challenges of emergency response in hotels. This is particularly true of communication flows and systems supporting them: all hotels will have organisational measures in place to deal with these alarms,

ranging from nominating fire and security officers among staff to detailed emergency preparedness and evacuation processes. Yet, all of this does not fully address a fundamental element at the heart of any incident: the human factor. In fire safety terms, the perfect scenario would be the standardised guest or member of staff – somebody whose characteristics could be immediately identified, with full mobility, no visual or hearing impairment and someone who we could predict, with absolute certainty, would respond in a very specific and uniform way in the event of a fire. Reality is, however, somewhat different, and the sheer diversity of the people that pass through or work in a hotel (staff turnover itself in the hotel and tourism industry can be as high as 31 % according to a Building Technologies; SAG study) means that organisational measures alone cannot address all the critical points in successful incident management, response and evacuation.

Evacuation Scenario

The above highlights all too clearly that merely detecting a fire is no longer enough. The fire safety market, driven by insurers, the emergency services and end-users themselves, is now focusing not only on prevention and detection but also on response to incidents. Performance based systems, again.

Using the evacuation procedure as a scenario, the benefits of an integrated, total building solution can be clearly demonstrated. As already



Integrated technologies for efficient hotel fire incident detection and response
(Copyright: Siemens Building Technologies, Total Building Solutions)



As part of their incident response preparedness, hotels increasingly need to take into account external factors and stakeholders, such as adjacent public car parks, on which they have little or no influence.

indicated, people do not react in a pre-defined way, particularly when they are in unfamiliar surroundings. Their responses vary, from indifference to panic. Add to that the likelihood that somebody is awakened from sleep and the resulting disorientation – studies show that the greatest number of guestroom fires (23%) occur between midnight and 2am – and the potential for misguided reactions and dangerous delays are self-evident. Even if the situation is correctly assessed, a variety of things can go wrong: guests going the wrong way or taking the elevator being two prime examples. By adopting an approach whereby the systems for heating, ventilation and air-conditioning (HVAC), fire and intrusion alarm technology and video surveillance are integrated, the potential for such problems can be significantly reduced. Starting with detection and alarm, in the case of a fire, hotel guests are usually awakened by an acoustic signal of some sort. However, given the characteristically poor reactions from people to a non-specific sound (a problem that is not helped by there being no international standard for alarm tones) lights can also simultaneously be switched on automatically. The activation of the lights immediately makes the guest more alert, as well as helping those who are deaf (if the guest has been identified as having a hearing impairment they may also have supplementary alerting devices, such as a vibrating unit located underneath their pillow or a radio-based device about their person, which is automatically triggered by the alarm). A touch panel in the room can then provide all the necessary information, importantly in the guest's own language – a significant point for hotels who often cater for a

wide range of nationalities. In extreme incidents fire fighters may require swift and unimpeded access to rescue guests – the blinds can be opened automatically by an integrated system to assist with entry via the windows. A loud-speaker announcement simultaneously warns the guests of the fire and asks them to evacuate their rooms (possibly in a number of languages). Moving into the corridor, again unfamiliar surroundings, the guest does not have to decide which way to go as a series of lights guides them to the exit. It is well documented that the by-product of fire i.e. smoke, is a much greater threat to human life than fire itself. It can also be very dis-orientating. The HVAC systems can be set to automatically switch to extract smoke and supply fresh air in the public areas, reducing the potential for panic and the effect that smoke inhalation can have on evacuating guests and staff. Integration through the building management system can ensure the elevators display 'out of service', the escalators move in one direction towards the exit and the revolving doors are automatically set to open. If the guests do not act appropriately, security staff can provide constant reassurance and guidance, monitoring the progress of the evacuation procedure via video surveillance and issuing appropriate announcements through the loudspeaker system.

Intelligent Response

As illustrated in the above example, it is becoming an ever more common practice for detection systems to be integrated with fire extinguishing and emergency lighting systems, voice alarm and mass notification systems as well as with building management systems for controlling

smoke, lifts and doors in any critical, potentially life-threatening situations. In terms of mass notification, much is now also being made of instant messaging, utilizing the "always connected" culture of mobile phones. The focus is increasingly on being prepared to react and to have plans in place to protect and direct as many people as possible to safety in any emergency situation, big or small. This means that the consequences of any incident can be kept to a minimum, not only in terms of injury, fatality or damage but also in regards to short-term and long-term commercial disruption.

This level of integration is, however, not the approach usually adopted in hotels. Yet the technologies deployed in hotels today, from flat screen TVs to wireless connectivity, could be harnessed as part of a holistic incident response management concept. This not only increases the likelihood of guests and staff getting the right information, but the multi-use of non-emergency technologies offers obvious financial advantages too. This is the direction the hospitality industry will need to adopt, and this is echoed by the development of Intelligent Response systems. These are systems that can analyze all relevant data collected from detectors, cameras and management systems from buildings over the entire area involved and provide updated instructions to everybody concerned. Timely information and instruction is vital in any emergency situation, particularly in a hotel where guests are invariably in unfamiliar surroundings. In extensive analysis of recent incidents, preparedness and communication were highlighted as critical for a successful emergency response. In an incident, people need to be told when to remain in



A lot of emphasis is put on incident prevention, detection and alarming systems but response to incidents through performance based systems is becoming an increasing focus.

place, when to move, when to leave and where to go. For example, while it may be appropriate to evacuate an area within a hotel without delay when a fire has been detected, this same response could have fatal consequences during a shooting incident.

The instructions that people are given should reflect the changing stages of the incident; they need the information that will simply and quickly take them to safety, without confusion and without hesitation, from a dynamic system that is able to constantly evaluate the situation. Whether the incident is a natural disaster, environmental accident, a fire, workplace violence or a terrorist threat, systems are now available to give response personnel a complete overview and a clear understanding of the situation in real time. Only by having such a thorough understanding and an appreciation of the obstacles and dangers that stand between facility occupants and safety, are those personnel equipped to take appropriate action and to deliver the correct, life-saving advice.

The Right Actions Quickly

This growing emphasis on response capability is happening in many markets, including hospitality, where there are significant numbers of people, sometimes over large areas and in numerous buildings. The difficulties involved in an emergency scenario include the need to ensure that everybody receives the appropriate information relevant to their particular situation – as well as ensuring that everyone has been safely evacuated before intervention activities (such as extinguishing/fire-fighting) begin. In certain remote locations, the potentially longer mobi-

lization times of the emergency or fire-fighting services will increase the challenge.

This is where Intelligent Response systems are invaluable. They involve a variety of integrated technologies which all work together to ensure that people within the location, regardless of their situation and circumstances, can be guided safely, quickly and efficiently to a place of safety. It also enables the emergency services to work together at the location and help contain the incident so that damage and injury are kept to an absolute minimum. In most critical scenarios, minimizing chaos, damage and injury – and saving lives - is not just about doing things quickly but about doing the right things quickly.

Putting Hotel Safety in Context

One of the important factors that a hotel proprietor must consider is the need for awareness of all of the elements that might impact on the safety of guests and staff. For example, any hotel, like all public buildings, will have an identified assembly point for use in the event of an evacuation. As many hotels are in city centre locations where space is often at a premium, getting to such a point could require guests and staff to cross a busy road which, in itself, can be hazardous. A hotel may well own its building but perhaps the car parking facilities are operated by a separate company. Car parks have their own fire safety requirements but it could well be a situation in which the hotel has little or no influence.

The level of coordination required, in many cases, goes beyond the walls of a hotel: coordination with other tenants, adjacent buildings or

hotels, fire services...all important and relevant stakeholders in incident response. But also the immediate environment of the hotel: busy city center, airport, etc...The bottom line is that regardless of fire safety regulations, hotel owners and operators need to look at external factors that can affect their ability to prevent, detect, respond to or even recover from fire safety incidents. And this can only be done if systems are implemented that are intelligent enough to process all parameters intelligently, to support real-time situational awareness and actions. These are performance-based, Intelligent Response systems.

► CONTACT

Siemens Switzerland Limited
Industry Sector
Building Technologies Division
International Headquarters, Zug, Switzerland
Tel.: +41 41 724 2424 · Fax: +41 41 723 5093
www.siemens.com/hospitality



FIRE DETECTION

Installing **Patiently**

Apollo Technology Chosen for £1 Billion Hospital Redevelopment

The new Royal London Hospital's state-of-the-art facilities will provide world class healthcare to an area undergoing significant regeneration. This will be Britain's largest new hospital and home to a range of specialist centers, including London's leading trauma and emergency care center and one of the UK's major children's hospitals. Apollo fire detection technology has been chosen to provide protection, with more than 7,500 devices already installed on site. Work is ongoing, with opening set for December 2011.

The Royal London is part of Barts and the London NHS Trust, which consists of St Bartholomew's Hospitals and the London Chest Hospital. The Trust is in the middle of delivering a new £1 billion hospital development – the largest in the world. The first phase saw the opening in March 2010 of the Bart's Cancer Center. Following the opening of the new Royal London Hospital later this year, the project will be completed with the opening of a specialist cardiac center at Barts in 2016. The main contractor on the project is Skanska and the fire system contract was awarded to Static Systems Group.

Continuity of Care

Barts and the London has one of the best patient survival records in the NHS. The Royal London Hospital provides district general hospital services for the City and Tower Hamlets and specialist tertiary care services for patients from across East London and beyond. More than 868,000 visitors passed through its doors in 2009-10.

The Royal London was founded in 1740 and has gradually expanded to occupy a number of buildings on its site in Whitechapel. The new development replaces a number of the old buildings with a coherent structure, purpose-built to support the delivery of 21st century clinical care. The design is sympathetic to the hospital's historic buildings, which are being retained, including the landmark facade on Whitechapel Road.

The new hospital comprises one 16-storey and one 17-storey tower, known as South and Center, and the 10-storey North tower. The Center Tower is equipped with a helipad for London's Helicopter Emergency Medical Service (HEMS), which is based at the hospital. Each of the three towers is served at ground level by a main lobby giving access to the lifts and staircase.

Fire Protection

Meeting the hospital's highly complex set of fire protection and evacuation requirements was the responsibility of Static Systems Group, who were awarded the contract for the design, supply, in-

stallation and commissioning of the system. The comprehensive fire detection system is designed around Static Systems' Series 900 panel, which is ideal for phased installation and occupation.

37 fire alarm panels have been provided in total, with two panels protecting each floor of the hospital except at ground level, where three control panels are installed. Each panel controls approximately 20 fire alarm zones, although this varies depending on the floor and tower, with the lower floors having a greater number of zones per panel. Main control of the fire alarm network is from the Fire Command Center, which has also been supplied with a sprinkler data gathering unit that registers activation and status of sprinkler flow switches and zone isolation valves throughout the building.

Due to the complex nature of the building and the setting, a number of interfaces were included in the project design. They enable other critical equipment to be activated in the event of an alarm, including automatic fire dampers, cold smoke extract systems, lifts, generators, oil and gas valves, door closers and air handling units. In addition, a modem link was created with St Bartholomew's Hospital, which is two miles away, to alert the Royal London in the event of an emergency.

Approximately 5,000 Apollo Discovery Multi-sensors and 2,500 XP95 mains switching input/output units have been installed to date to protect the 675-bed hospital. Chris Smith, Systems



Royal London atrium

Engineering Manager at Static Systems, said: "When you have a project that is on such a large scale, you want a reliable system that is easy to configure. Our panels give us the flexibility to network and install the system over time."

"Apollo's analog addressable technology gave us the reliability and flexibility to meet the client's requirements on this demanding project, whilst its open protocol gives us the ability to mix and match products to meet the specific

needs of the site. It also future-proofs the fire system because the analog addressable devices are forwards compatible, so any future system extension and maintenance will be simple to achieve."

► CONTACT

Apollo Fire Detectors Ltd., Havant, UK
 Tel.: +44 2392 492 412 · Fax: +44 2392 492 754
 info@apollo-fire.co.uk · www.apollo-fire.co.uk

EVAC+CHAIR®

More Than Just The World's Proven No1 Emergency Stairway Evacuation Chair

Evac+Chair is the *complete* Emergency Stairway escape Solution for people with reduced mobility, offering...

- ✓ **Certificated Escort Training**
- ✓ **5 Year Parts/Workmanship Warranty**
- ✓ **Annual Service Contracts**

Evac+Chair Mk3 carries 150kg load on 28° - 40° gradients and is NFPA compliant.

NEW Evac+Chair Mk 3

Evac+Chair International Ltd
 ParAid House Weston Lane Birmingham B11 3RS GB info@evacchair.co.uk

Germany 06 - 238 - 984 - 6810 Fax 06 - 238 - 984 - 6835
 International +44 (0)121 706 6744 Fax +44 (0)121 706 6746

www.evacchair.co.uk

CE, NFPA, ISO 9001:2000, FM 38905

IN CASE OF FIRE USE STAIRS - NOT LIFTS



FIRE PROTECTION

Building Construction Using Technical Textiles

The EU Context Project

Fig. 1a: Textile material used as a roofing material; the Frankfurt Arena

After four years' work, the EU Context project has now been concluded. The aim of the project has been to increase the number of applications and the use of technical textiles in the building sector. As one of the project partners, SP Fire Technology has provided the necessary expertise in fire technology. Much of the information regarding fire properties from the project has now been published in the form of a number of SP reports.



Fig. 1b: Demonstration of integrated solar cells in a textile membrane (Context)

Textiles As Building Materials

Textile materials are used today in various types of buildings: one example is the Commerzbank Arena in Frankfurt (Figure 1a), which uses a textile membrane for roofing, while another is the Allianz Arena in München which uses textile membranes for both roofing and wall materials. Bangkok International Airport is another example of an advanced application of textile membranes for a permanent building. Applications in Sweden include exhibition centres, aircraft hangars and use as functional/decorative building elements, such as room dividers or floating ceilings in atria. Advantages of these materials include low weight, translucency and their potential for architectonic expression. However, a common limitation on all textile materials is their fire behaviour, which emphasises the importance of correct fire safety assessments when using such materials in building structures.

The EU Context Project

The EU Context project, 'Textile Architecture – Textile Structures and Buildings of the Future,' was a major 'Integrated Project' in the Sixth Framework programme, bringing together a consortium of more than 30 partners from ten

countries. The project's aims included development of new lightweight buildings incorporating textile structures, together with development of the necessary safety, health and cost aspects. The project included development of textile membranes with improved properties such as selfcleaning, light admission and UV stability. One exciting application, shown in Figure 1b, was that of integrating solar cells into the surface of the membrane. Other areas included the development of concrete with lightweight reinforcement, and of lightweight textile cables for supporting or staying building structures. As one of the project partners, SP Fire Technology has provided the necessary fire technology expertise. The work has covered everything from testing of materials and largescale reference trials, to development of design methods for analytical fire protection design. The Swedish Fire Research Board (BRANDFORSK) has partly financed SP's work on the project, and has engaged Lund Institute of Technology Fire Technology, consultants Brandskyddslaget and a reference group in order to apply the information from the project for Sweden and Swedish conditions. This article describes a number of examples from the work, while further information can be found in the reports listed in the next page.



Fig. 2a: SBI testing of a textile membrane



Fig. 2b: Largescale reference test using textile membrane

Fire Requirements for Textile Membranes

Prescriptive fire safety regulations which in detail regulate the design and classification of building components can exclude the use of textile materials which do not conform to the required fire rating. In such cases, a performance based approach to comply with the overall fire safety level of the building can be a valid alternative. Both these methods of fire design using textile building materials have been used in the Context project, with particular emphasis on textile membranes.

Textile membranes for building applications have previously been tested in accordance with various national test standards, often German or French, but are increasingly being tested by the SBI method (EN 13823) in accordance with EN 135011. However, very little was known concerning the correlation between the SBI method for these materials and their behaviour under real fire conditions. Largescale reference tests (Figure 2b) were therefore carried out, using a

selection of various membranes that had previously been tested using the SBI method (Figure 2a). One conclusion of this work was that the SBI method gave a conservative classification of PVCPEs (polyester) products that were tested mounted with an air gap, i.e. the products behaved better in the largescale fire test than had been indicated by the SBI tests. Another conclusion was that the method of mounting thin PVCPEs membranes for an SBI test entirely determines the classification results. Installation using a 'corner support' is generally recommended in order to achieve correct and repeatable results.

Analytical Design

When used as ceiling or wall materials, PVCPEs textile membranes exposed to fire can burn through, which can change the ventilation and air supply conditions in a building fire. The project included mathematical modelling of burnthrough and hole-opening. This was done using CFD (FDS) and the 'burnaway' alternative,

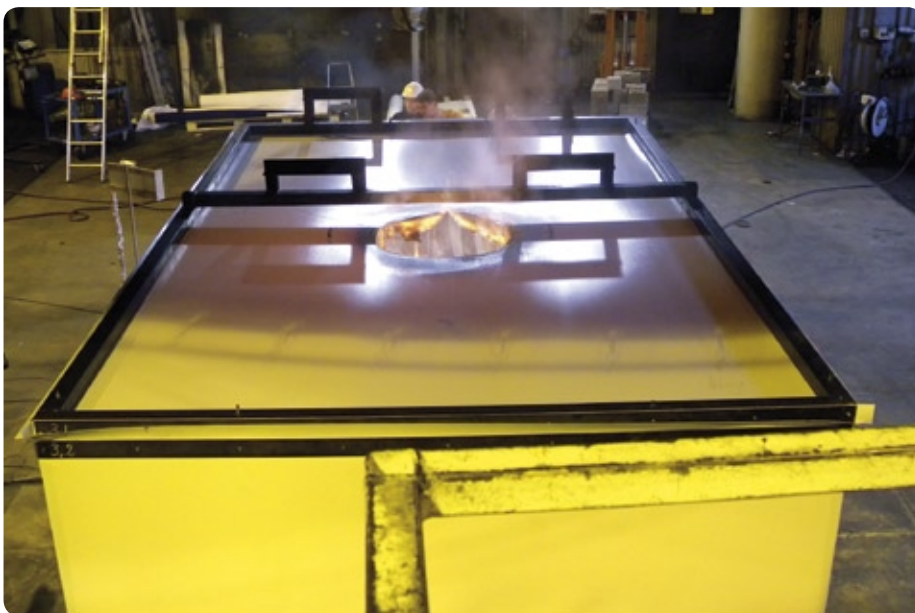


Fig. 3: Validation testing of burnthrough of a textile membrane



Fast and reliable
Technologies from detectomat



40 Years JOB
40 Years Innovation

- Multi sensor detectors - Technology against false alarms
- Voice alarm system sound detect
- HDv sensys: the next generation of residential smoke alarms

See us at Hall 3, C30



INTERNATIONALFIREX
16-19 May 2011
NEC Birmingham

detectomat GmbH
An der Strusbek 5
22926 Ahrensburg
Germany

Tel.: +49 (0) 4102 - 2114 - 60
Fax: +49 (0) 4102 - 2114 - 670
E-Mail: info@detectomat.com
Web: www.detectomat.com

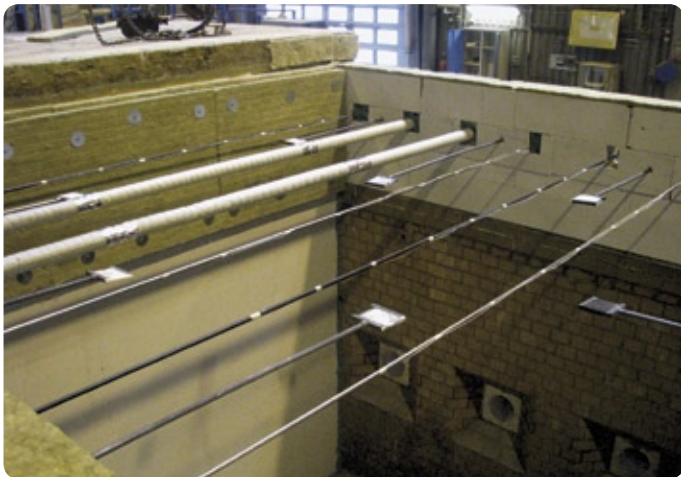


Fig. 4a: SP's horizontal furnace, showing installed cables, before closing the furnace



Fig. 4b: The top view of the furnace with load arrangements and strain gauges

together with two different pyrolysis models. Input data for the model was taken from the cone calorimeter (ISO 5660), thermogravimetric analysis (TGA) and thermal conductivity properties (TPS). The results of the simulations were validated against fullscale experiments which investigated the behaviour of two different membranes (see Figure 3). More practical applications of the model were investigated using two of the Context project demonstration buildings, the VUB and Wagner buildings. The work showed that the simulation tool, for a given fire loading, can open up a representative hole in a textile membrane in a building fire simulation. It was, however, shown that there are several relatively substantial uncertainty factors in such modelling.

Textile Cables

Bexco, one of the companies in the project, manufactured textile cables for use as lightweight alternatives to the steel cables that are normally used to support textile building structures. These

cables were made from a polymer that produced a light cable having a tensile strength equivalent to that of a steel cable of the same diameter. The tensile strength and strain characteristics of the cable were tested in fullscale furnace tests, as shown in Figure 4. The tests compared the properties of the polymer cable with those of a steel cable, and demonstrated a way of insulating the polymer cable. The results showed that the new polymer cable had excellent properties up to an ambient temperature of over 350 °C: at higher temperatures, the cable must be protected if it is to replace a traditional steel cable.

Reports

The following reports describe the work and results from the Context project: all can be downloaded from www.sp.se.

- SP Report 2007:20, "A summary of fire regulations, requirements and test methods for technical textiles used in buildings."

- SP Report 2010:23, "Fire tests with textile membranes on the market – results and method development of cone calorimeter and SBI test methods."
- SP Report 2010:24, "Fire Safety Engineering of textile buildings following the prescriptive requirements in Sweden."
- SP Report 2010:54, "A burn-through model for textile membranes in buildings as a tool in performance based fire safety engineering."
- SP Technical Note 2010:03, "Large-scale fire tests with textile membranes for building applications."

CONTACT

Per Blomqvist

SP Technical Research Institute, Borås, Sweden
 Tel.: +46 10 516 5670 · Fax: +46 33 417759
per.blomqvist@sp.se · www.sp.se

Wiley Handbook of Science and Technology for Homeland Security

The Wiley Handbook of Science and Technology for Homeland Security is an essential and timely collection of resources designed to support the effective communication of homeland security research across all disciplines and institutional boundaries. Truly a unique work this four-volume set focuses on the science behind safety, security, and recovery from both man-made and natural disasters has a broad scope and international focus.



Edited by **John G. Voeller**

4-volume print set

ISBN: 978-0-471-76130-3

2,888 pages | 2010

Online ISBN: 978-0-470-08792-3

2010

www.wiley.com



Lightweight Patient Trolley Stretcher

The Paresi easi-lite is a safe patient transport technology by Evac+Chairs. The ultra lightweight, tough composite construction and fully adjustable height offer health service and ambulance professionals an easy-to-use, ergonomic patient trolley. A patented stabilization system caters for safe, dependable long term service.



www.evac-chair.com

Ambulance Child Restraint

The Ambulance Child Restraint (ACR) is an essential requirement for safe transportation of sick or injured children in ambulances. The innovative, flexible and fully adjustable harnessing system is a CEN approved safety harness for children ranging in weight from 5 Kgs to 45 Kgs. Quick release clips dock with the ACR harness, holding the patient in place to prevent potentially dangerous movement during transportation. The ACR is machine washable for infection control.



www.evac-chair.com

Sensor for Multi-Gas Monitor

Industrial Scientific has announced that a new infrared sensor is now available for use with the BM25 multi-gas area monitor. The XP IR sensor further expands the manufacturer's range of gas detection capabilities. With this sensor, the BM25 can detect from one to five gases with interchangeable smart sensors for combustible gases, oxygen and toxic gases including CO, H₂S, SO₂, NO₂, Cl₂, ClO₂, NH₃, PH₃, AsH₃, SiH₄, ETO, NO, HCl, HCN and CO₂. IR sensors do not react with poisons known for damaging catalytic sensors, such as silicone, H₂S, chlorinated solvents and more. Compared to a catalytic sensor, the XP IR sensor has a longer lifetime and carries a 3-year warranty. The monitor packs the benefits of a fixed system area monitor into an easily transportable, yet rugged system. Designed for mobile or temporary applications in a variety of industries, the unit is particularly useful for shut downs, hot work or for use in places where fixed detection systems are not suitable. emilie.ravet@eu.indsci.com

Analysis of Electromagnetic Fields

Narda Safety Test Solutions presents the EHP-50D isotropic field analyzer, an improved version of the measuring probe for low frequency electromagnetic fields from 5 Hz to 100 kHz. It expands the measuring range of the manufacturer's portable, wide-band NBM-550 measuring set from 5 Hz to 60 GHz. The EHP-50D probe was specially developed for assessing industrial workplaces in accordance with current international standards, and for measurements on industrial equipment. Simultaneous measurement of all three axes coupled with a dynamic range of up to 150 dB ensures that signals can be captured quickly, reliably and over a wide range. The built-in spectrum analysis feature means that measurements targeting individual events can be made while neighboring frequencies are effectively blanked out. support@narda-sts.de



Wireless Fire Detection

Apollo has updated and extended its Xpander range of wireless fire detectors. Designed for use in areas where hard-wired fire detection is impossible or impractical, the devices are designed for use in historic buildings, remote annexes and temporary structures. Large amounts of cabling for hard-wired fire detection can be impractical where there is a need to protect a building's interior or where there are many buildings spread across a site. Temporary structures also require adequate fire protection, yet installing hard-wired technology in these circumstances can be expensive or impractical. The extended fire detector range now consists of an optical smoke detector, a multisensor smoke detector, heat detector types A1R and CS, a wireless base, a manual call point, a sounder and a sounder beacon, and Single and Dual Input/Output Units. The complete range has been granted the new wireless link fire standard EN54 Part 25, which is the standard for European-compliant radio products. info@apollo-fire.co.uk



SETTING STANDARDS FOR FIRE PROTECTION.

Saving lives, goods and businesses:
With fire protection solutions
from WAGNER .



WAGNER Group GmbH
Phone: +49 (0)511-97383-0
www.wagner.eu



INTERNATIONAL FIREX / IFSEC

Sensitive Detection Plus Advanced Alarm Technology

detectomat and JOB will show a series of product innovations at Ifsec/ International Firex in Birmingham in May. New detector technology will be added to the established detector portfolio and a special focus will be set on control panels and alarm technology.

Multi Sensor Detectors Against False Alarms

The Fusion technology from detectomat includes a highly sensitive measuring device, which covers all evaluated wavelength areas and comprehends evaluation intelligence for alarm verification. detectomat has developed a new generation detector with enhanced reliability via its brand new Fusion technology and special feature ability to detect small and large particles. The Fusion detectors also evaluate a spectrum of blue light which facilitates the analysis and evaluation of the smallest test gas particles, which are beyond the detection range of conventional detectors.

The new patented technology Humitec helps to eliminate false alarms due to bedewing and humidity, as well as verification of real fires. The new technology is providing a measuring system to detect bedewing inside the measuring chamber of optical detectors. These methods are combined with complex algorithms, developed in over 30 years of experience. The multi sensor detectors PL 3300 OTi and PL 3300 OTi Fusion in addition, make these detectors the most reliable in the world.

Fire Control Panel Technology

The market leading system detect 3000/detect 3004plus was developed according to the latest state-of-the-art technology and equipped with additional features which meet the changing market requirements. Via network technology, complex systems will be implemented according to EN 54-13 and realized peripheral. The visualization software was developed further and reflects also the increased requirement for the multiple network management.

The Voice Alarm System Sound Detect

With this new range, detectomat completes its portfolio as a system provider. The sound detect system is approved according to EN 54-16 and 54-2 and offers the highest voice quality next to flexible equipment for projects of all sizes. For example, a school can be equipped with a compact system of detectomat sound detect cor-



responding to the latest-state-of-the-art voice alarm systems. In certain extreme situations, e.g. amok circuits, the system offers the possibility to react reliably via built-in functionality. The fire alarm system detect 3000 will be connected via defined interfaces.

Wireless System

With the wireless system detect SRC 3000, detectomat offers efficient solutions: Up to 100 components will be connected to the radio panel SRC 3000. In addition to optical smoke detectors of the HDv 3000 O series in different designs, there can also be monitored the heat detectors HDv 3000 T, push button and sounder or beacon. The reliability and easy handling confirms more than 1,000 installations of the system worldwide. The system will be used in applications which do not comply with requirements for fire alarm systems and thus increase the safety in buildings immensely.

Thermal Detector

As completion of the series HDv 3000, detectomat provides a thermal detector which is suitable for the use in areas with critical conditions (e.g. kitchens and bathrooms). An integrated wireless interface enables the connection to the radio panel SRC 3000 and offers the possibility of cascaded interconnection. The HDv 3000 T is compatible with the features of the Series HDv 3000 O.

In addition to these innovations, detectomat presents a complete product portfolio in the range of smoke detectors and completes the product range with various design options, next to connections for emergency systems with op-

portional accessories for customized solutions (e.g. for blind or hearing impaired people).

Smoke Detectors of the Next Generation

With the HDv sensys, detectomat presents the next generation of the smoke detector. A new battery concept, a proven large mute button and additional technical innovations assure the increased demands of the housing industry and set trends on the market. detectomat is following the objective to further expand its position of a leading manufacturer. The HDv sensys meets the requirements of the EN14604 and the advanced request according to VdS 3131.

40 Jahre JOB – 40 Years of Innovation

The products of the sister company JOB GmbH, which celebrates its 40th anniversary this year, are also on the show. Since launching of JOB Thermo bulbs, the thermal activating glass bulbs had become a standard in the sprinkler industry. More than 800 million of hermo Bulbs been installed by manufactures of sprinkler systems due to the high quality and reliability for the prevention of fire and personal security. A patented solution for the thermal activation of safety valves for gas-powered vehicles will be presented as novelty at the Ifsec – International Firex.

**Ifsec – International Firex in Birmingham:
Hall 3 · Stand C30**

► CONTACT

detectomat GmbH, Ahrensburg, Germany
Tel.: +49 4102 211 460 · Fax: +49 4102 211 4670
info@detectomat.de · www.detectomat.de




Security Management

ABUS Security-Center 

ABUS Security-Center GmbH & Co. KG
Linker Kreuthweg 5, D-86444 Affing
Tel. +49 (0) 8207 / 9 59 90 - 333
Fax +49 (0) 8207 / 9 59 90 - 100
info.de@abus-sc.com · www.abus-sc.com

ABUS Security-Center is one of the leading manufacturers of electronic security technology. As a full-line supplier, ABUS Security-Center consistently markets an international range of products and services for the market segments of intrusion detection and video surveillance.

Alarm Management



ATRAL-SECAL GmbH
Service Daitem
Thaddenstr. 4 · D-69469 Weinheim
Tel. +49(0)6201/6005-0 · Fax +49(0)6201/6005-15
info@daitem.de · www.daitem.de

Radio-controlled burglary alarm systems, radio-controlled fire warning devices, distribution via security suppliers

Facility Security

DICTATOR

Dictator Technik GmbH
Gutenbergstr. 9 · 86356 Neusäß
Tel. +49(0)821/24673-0 · Fax +49(0)821/24673-90
info@dictator.de · www.dictator.de

Drive units, hold open systems and smoke detectors, door control solutions

Security Management



Advancis Software & Services GmbH
Monzastraße 2 · D-63225 Langen
Tel.: +49 (6103) 80735-0 · Fax: +49 (6103) 80735-11
info@advancis.de · www.advancis.de

WinGuard – Integral system for security and building management, control and visualization, alarm management, video management, communication

Be Part of the Section

GIT BUSINESSPARTNER
The Purchasing Section for direct contact

Just send a mail to
heiko.baumgartner@wiley.com

We will be glad to advise you!


Facility Security



GEZE GmbH
Reinhold-Vöster-Str. 21-29 · D-71229 Leonberg
Tel. +49(0)7152/203-0 · Fax +49(0)7152/203-310
vertrieb.services.de@geze.com · www.geze.com

Automatic door systems, security systems, security locks

Security Management

LevelOne is a trademark of Digital Data Group 

Digital Data Communications GmbH
Zeche-Norm-Straße 25 · D-44319 Dortmund
Tel. +49 (0) 231-9075-222 · Fax +49 (0) 231-9075-184
sales@level-one.de · www.level-one.de

LevelOne provides full service – even when it comes to security: A broad range of high quality IP-products, combined with expertise in projects, assure reliable security solutions in all dimensions.

Alarm Management

DIGISOUND

Digisound Electronic GmbH
Oststraße 54 · 22844 Norderstedt
Tel. +49(0)40/526869-0 · Fax +49(0)40/526869-13
info@digisound.de · www.digisound.de

Acoustic buzzers, piezo-electric sounders, electronic beacons, speakers, and transducers

Facility Security

Simons Voss technologies

SimonsVoss Technologies AG
Feringastr. 4 · D-85774 Unterföhring
Tel. +49(0)89/99228-180 · Fax +49(0)89/99228-222
marketing@simons-voss.de · www.simons-voss.de

Digital locking and organisation systems with optional access control and time recording

Security Management

funkwerk 
plettag

Funkwerk plettac electronic GmbH
Würzburger Straße 150 · D-90766 Fürth
Tel. 0911/75884-0 · Fax 0911/75884-220
info@plettac-electronics.de
www.cctv-systeme.com

CCTV, system solution, system integration, video monitoring security, building management

Alarm Management



TAS Telefonbau
A. Schwabe GmbH & Co. KG
Langmaar 25
D-41238 Mönchengladbach
Tel. +49 (0) 2166 858 0 · Fax: +49 (0) 2166 858 150
info@tas.de · www.tas.de

Manufacture and development of: alarm and conference units, VoIP- or ISDN emergency technology, alarm transmission systems



Security Management



Schille Informationssysteme GmbH
Goseriede 4 · D-30159 Hannover
Tel. +49(0)511/542244-0 · Fax +49(0)511/542244-22
info@schille.com · www.schille.com

Facility and building management and security technology, fault and hazard management systems, OPC development, video surveillance systems

Alarm Management



tetronik GmbH
Angewandte Elektronik und Nachrichtentechnik
Silberbachstr. 10 · D-65232 Taunusstein
Tel. +49-6128-963-1 · Fax +49-6128-963-499
info@tetronik.com · www.tetronik.com

broadcasts and alarms, telephone conferences, personal security measures with location tracking and visualisation, one number services and group calls, announcement and open listening services, telephony access services for host systems

Video Technology

ABUS Security-Center 

ABUS Security-Center GmbH & Co. KG
Linker Kreuthweg 5, D-86444 Affing
Tel. +49 (0) 8207 / 9 59 90 - 333
Fax +49 (0) 8207 / 9 59 90 - 100
info.de@abus-sc.com · www.abus-sc.com

ABUS Security-Center is one of the leading manufacturers of electronic security technology. As a full-line supplier, ABUS Security-Center consistently markets an international range of products and services for the market segments of intrusion detection and video surveillance.

Video Technology



Aimetis GmbH
Am Prime Parc 7 · D-65479 Raunheim
Tel. +49 (0) 6142 20798 60 · Fax +49 (0) 6142 20798 89
info@aimetis.com · www.aimetis.com
Aimetis Symphony™ is award-winning intelligent video surveillance software that offers a single, innovative, open IP video platform for video management, video analytics, system integration and alarm management.

Video Technology



DynaColor, INC
NO.116, Jou Tz Street, Neihu, Taipei 114, Taiwan
Tel: +886-2-2659-8898 . Fax: +886-2-2659-8868
info@dynacolor.com.tw · www.dynacolor.com.tw
Manufacturer of IP surveillance and HD-SDI / CCTV products.

Video Technology



HeiTel Digital Video GmbH
Stuthagen 25 · D-24113 Molfsee/Kiel (Germany)
Tel. +49(0)4347/903-0 · Fax +49(0)4347/903-400
info@heitel.com · www.heitel.com
Digital Video Transmission and Recording,
Video Management, Monitoring Station Integration

Video Technology



Axis Communications GmbH
Lilienthalstraße 25 · D-85399 Hallbergmoos
Tel. +49 (0)811 55508-0 · Fax +49 (0)811 55508-69
info-de@axis.com · www.axis.com
Network video equipment – the AXIS IP-Surveillance allows remote access video management

Video Technology



Eneo is a registered trade mark of VIDEOR E. Hartig GmbH, Rödermark. Distribution via authorized dealers and installers.
info@eneo-security.com · www.eneo-security.com
Products and solutions for video security applications

Video Technology



logiware gmbh
Alfred-Mozer-Str. 42 · D-48527 Nordhorn
Tel. 05921/7139920 · Fax 05921/7139929
info@logiware.de · www.go1984.de
Software, video transmission systems, security, video, video surveillance systems, digital video surveillance, networking

Video Technology



BWA Technology GmbH
Johann-Krane-Weg 21 · D-48149 Münster
Tel.: +49(0)251/289199-0 · Fax: +49(0)251/289199-29
info@bwatech.com · www.mybwa.com
CCTV robots and portable MPEG4/H.264 DRVs

Be Part of the Section
GIT BUSINESSPARTNER
The Purchasing Section for direct contact
Just send a mail to
heiko.baumgartner@wiley.com
We will be glad to advise you!

Video Technology

Milestone Systems Germany
Harald Zander, Country Manager
Eltviller Str. 5, 65197 Wiesbaden
Tel. +49 (0) 611 168 5597
Mobile +49 (0) 176 62479674
www.milestonesys.de
Milestone Systems is the leading global developer of open platform IP video management software. XProtect™ is a powerful surveillance solution that is easy to manage and supports the widest choice in network hardware and integrations with other business systems.

Video Technology



Convision Systems GmbH
Gablonzstraße 9 · D-38114 Braunschweig
Tel. +49(0)531/26450 - 0 · Fax +49(0)531/26450-10
info@convision.com · www.convision.com
Remote video transmission with long term and event driven recording. Live video image transmission, alarm messages or status reports can be send by Email, SMS or FTP. Display via standard internet browser.

Video Technology



Everfocus Electronics AG
Albert-Einstein-Str. 1 · 46446 Emmerich
Tel. +49(0)2822/9394-0 · Fax +49(0)02822/9394-95
info@everfocus.de · www.everfocus.de
Digital video technology, video remote surveillance, video surveillance

Video Technology



MINTRON ENTERPRISE CO. LTD.
No. 123, Wu-Kung 1 Rd., Wu-Ku Industrial Park, Taipei 248, Taiwan
Tel. +886 2 22990277 · Fax +886 2 22989375
service@mintron.com.tw · www.mintron.com
Skype: mintron3601
Manufacturer of extensive range CCD cameras and board type cameras. OEM & ODM projects are welcomed.

Video Technology



Dallmeier electronic GmbH & Co. KG
Cranachweg 1 · 93051 Regensburg
Tel. +49(0)941/8700-0 · Fax +49(0)941/8700-180
info@dallmeier.com · www.dallmeier.com
Video: digital storage systems, image transmission, available through specialized retailers

Video Technology



eyevis GmbH
Hundschleestr. 23 · D-72766 Reutlingen
Tel. +49(0)7121/43303-0 · Fax +49(0)7121/43303-22
info@eyevis.de · www.eyevis.de
Large surface displays of security information in control rooms

Video Technology



MOBOTIX AG
Security-Vision-Systems
Kaiserstrasse · D-67722 Langmeil
Tel. +49 (0) 6302/9816-0 · Fax +49 (0) 6302/9816-190
info@mobotix.com · www.mobotix.com
HiRes Video Solutions – high resolution, digital & cost effective recording

Video Technology



DEKOM Video Security & Network GmbH
Hoheluftchaussee 108 · D-20253 Hamburg
Tel. +49(0)40/4711213-0 · Fax +49(0)40/4711213-33
info@dekom-security.de · www.dekom-security.de
www.divicro.de – Offices in Munich, Stuttgart, Cologne, Erkelenz, Bremen, Magdeburg and Berlin.
Your reliable partner and provider of professional network video products and complete system solutions.

Video Technology



Genetec
2280 Alfred-Nobel Blvd
Suite 400, Montreal, Quebec H4S 2A4, Canada
Tel.: +1/514 332-4000 · Fax: +1/514 332-1692
info@genetec.com · www.genetec.com
License Plate Recognition, IP Security Solutions for Video Surveillance, and Access Control

Video Technology



MONACOR INTERNATIONAL
Zum Falsch 36 · 28307 Bremen
Tel. +49(0)421/4865-0 · Fax +49(0)421/488415
info@monacor.de · www.monacor.com
Video monitoring components and systems

Video Technology

opto-system-technik
Video-Vertriebsgesellschaft mbH
Planiger Straße 34 · D-55545 Bad Kreuznach
Tel. +49(0)671/4830-10 · Fax +49(0)671/4830-11
info@opto-system-technik.de
www.opto-system-technik.de
Distributor of SONY, SANYO, Pelco,
Dedicated Micros and EverFocus

Video Technology

VICON

VICON Deutschland GmbH
Kornstieg 3 · D-24537 Neumünster
Phone: +49(0)4321/879-0 · Fax +49(0)4321/879-97
info@vicon-cctv.de · www.vicon-cctv.de
VICON as one of the world's leading independent manufacturers of CCTV equipment, offers a complete portfolio of the most advanced video management products.

Time + Access



Video Technology

PENTAX

PENTAX Imaging Systems GmbH
Security Systems Division
Julius-Vosseler-Str. 104 · D-22527 Hamburg
Tel. +49(0)40/561 92-109 · Fax +49(0)40/561 92-334
ssd@pentax.de · www.pentax.de
CCTV lenses for video surveillance, image processing, accessories for CCTV lenses

Video Technology

VIDEOR

VIDEOR E. Hartig GmbH
Carl-Zeiss-Str. 8 · 63322 Rödermark/Germany
Tel. +49(0)6074/888-300 · Fax +49(0)6074/888-100
security@videor.com · www.videor.com
Distribution of complete product ranges for video security and video networking

Time + Access

cichon+stolberg
cryptin

Cichon+Stolberg GmbH
Wankelstraße 47-49, 50996 Köln
Tel. +49(0)2236/397-200 · Fax +49(0)2236/61144
info@cryptin.de · www.cryptin.de
Operational data collection, time recording, access control

Video Technology

PIEPER
Partner für bessere Technik

PIEPER GMGH
Binnerheide 8 · D-58239 Schwerte
Tel. +49(0)2304/4701-56 · Fax +49(0)2304/4701-77
info@pieper-video.de · www.pieper-video.de
System suppliers of general and industrial video technology, focussing on the security and surveillance sectors, as well as quality control and process control applications.

Be Part of the Section

GIT BUSINESSPARTNER
The Purchasing Section for direct contact

Just send a mail to
heiko.baumgartner@wiley.com

We will be glad to advise you!

Time + Access

deister electronic
The RFID Company

deister electronic GmbH
Hermann-Bahlsen-Str. 11
D-30890 Barsinghausen
Tel. +49(0)5105/516-01 · Fax +49(0)5105/516-217
info@deister-gmbh.de · www.deister.com
access control; vehicle identification; biometric verification; guard tour systems; storing and management of keys and valuables

Video Technology

SAMSUNG

Samsung Europe
Hillswood Drive 1000
Chertsey, Surrey KT16 0PS
United Kingdom
Tel.: +44 1932 455308
steseurity@samsung.com · www.samsungsecurity.com
Samsung is one of the fastest growing professional security brands in Europe and provides a complete range of security solutions that are suitable for a wide range of applications.

Video Technology

VTQ
VIDEOTRONIK QUERFURT

VTQ Videotronik GmbH
Grüne Straße 2 · D-06268 Querfurt
Tel. +49 (0) 34771-5 10 · Fax +49 (0) 34771-2 20 44
main@vtq.de · www.vtq.de
systems for digital and analogue wireless video, audio and data transmission, COFDM modulation, MPEG2 compression, directional radio systems, Diversity systems

Zeit + Zutritt

DigiMem


DigiMem Deutschland Ltd & Co KG
Büro Wiesbaden: Didierstraße 7 · D-65203 Wiesbaden
Tel: +49 (0)611 710 9949 · Fax: +49 (0)611 710 9952
david@digimem.eu · www.digimem.eu
Digimem is the appointed agency of Datakey Electronics (USA) and provides full bi-lingual sales and service support for German, Swiss and Austrian customers. Supply of Datakey Keys and Tokens, accessories and periphery to OEMs. Support with the integration of these components into an application to ensure a turnkey system.

Video Technology

SANTEC
VIDEO TECHNOLOGIES

Sanyo Video Vertrieb AG
An der Strusbek 31 · 22926 Ahrensburg · Germany
Tel. +49 4102 4798 0 · Fax +49 4102 4798 10
info@santec-video.com · www.santec-video.com
Video monitoring technology · Video-over-IP
Outdoor IR sensors · Planning and Services

Biometrics



Time + Access

FEIG
ELECTRONIC

FEIG ELECTRONIC GMBH
Lange Straße 4 · 35781 Weilburg
Tel. +49(0)6471/3109-44 · Fax +49(0)6471/3109-99
obid@feig.de · www.feig.de
Electronic locking systems, identification, access control, access road control

Video Technology

via:sys

viasys Intelligent Video GmbH
Koselstraße 20, D-60318 Frankfurt am Main
Tel. +49 (0)69/7191 388 – 0
Fax +49 (0)69/7191 388 – 66
jourdan@viasys-iv.com · www.viasys-iv.com
Intelligent video sensors (3D, direction, sensitivity), reliable alarms, especially outdoors, connection to Alert Centre

Biometrics

IDENT TECHNOLOGIES
Biometrische Identifikations-Systeme

Ident Technologies GmbH
Rudower Chaussee 29 · D-12489 Berlin
Tel. +49(0)30/63922568 · Fax +49(0)30/63922569
info@identtechnologies.de · www.identtechnologies.de
We create biometric Systems, to make our life easier – the fingerprint will be our key.

Time + Access

Gantner
technologies

Gantner Electronic GmbH
Montafonerstraße 8 · A-6780 Schruns
Tel. +43 5556 73784-542 · Fax +43 5556 73784-8000
info@gantner.com · www.gantner.com
access control solutions/biometrics, time management, data capture, locking systems

Time + Access



ISGUS
UNTERNEHMENSGRUPPE

ISGUS GmbH
Oberdorferstr. 18-22
78054 Villingen-Schwenningen
Tel. +49(0)7720/393-0 · +49(0)7720/393-184
info@isgus.de · www.isgus.de
Operational data capture, personnel scheduling,
time management, access control

Fire Protection




Fire Protection



Kidde
A UTC Fire & Security Company

Kidde Brand- und Explosionsschutz GmbH
Harkortstraße 3 · 40880 Ratingen
Tel. +49(0)2102/5790-0 · Fax +49(0)2102/5790-109
info@kidde.de · www.kidde.de
Fire detection and extinguishing technology ·
high sensitive smoke detection · fire protection
systems for server cabinets and IT rooms ·
explosion suppression systems · Explosion venting

Time + Access



LEGIC
innovation in ID technology


LEGIC Identystems Ltd
Binzackerstrasse 41 · CH-8620 Wetzikon
Switzerland
Phone +41 44 933 64 64 · Fax +41 44 933 64 65
www.legic.com · info@legic.com
Designer and manufacturer of 13.56 MHz
contactless smart card technology (read/write chip
sets, security modules and transponder chips)

Fire Protection



C-TEC (Compuionics Limited)
Stephens Way, Wigan, WN3 6PH United Kingdom
Tel. +44(0)1942/403810 · Fax +44(0)1942/829867
sales@c-tec.co.uk · www.c-tec.co.uk
Fire Panels, Fire Alarm Accessories, Voice Alarm
Systems, Fire Telephone Systems, Call Systems,
Power Supplies

Fire Protection



NOTIFIER
by Honeywell

Notifier Sicherheitssysteme GmbH
Berliner Str. 91 · D-40880 Ratingen
Tel. +49(0)2102/70069-0 · Fax +49(0)2102/70069-44
info@notifier.de · www.notifier.de
fire alarm systems, early fire detection

Time + Access



pcs

PCS Systemtechnik GmbH
Pfälzer-Wald-Straße 36 · 81539 München
Tel. +49(0)89/68004-550 · Fax +49(0)89/68004-555
intus@pcs.com · www.pcs.com
time recording, access control, BDE/MDE, biometric,
video, SAP, Infor-Baan

Be Part of the Section



Just send a mail to
heiko.baumgartner@wiley.com
We will be glad to advise you!

Fire Protection



STÖBICH
FIRE PROTECTION
INVESTMENT FOR YOUR PROTECTION

Stöbich Brandschutz GmbH
Pracherstieg 6 · 38644 Goslar · Germany
Tel.: +49 (0) 53 21 / 57 08 - 0
Fax: +49 (0) 53 21 / 57 08 - 991
info@stoebich.com · www.stoebich.com

- Textile fire and smoke protection closures
- Flexible and static smoke barriers
- Conveyor system closures
- Control units and 400-volt-emergency backup systems
- Fire protection hoods for electric devices

Time + Access



phg
Die richtige Verbindung

phg Peter Hengstler GmbH + Co. KG
Dauchinger Str. 12 · D-78652 Deißlingen
Tel. +49(0)7420/89-0 · Fax +49(0)7420/89-59
datentechnik@phg.de · www.phg.de
RFID components for access control, timekeeping, factory
data collection, canteen data, leisure applications, surface-
mounted devices, flush-mounting components, biometrics,
identification media and accessories


Fire Protection



JOO
detectomat

detectomat GmbH
An der Strusbek 5 · D-22926 Ahrensburg
Tel. +49(0)4102/2114-60
Fax +49(0)4102/2114-670
info@detectomat.de · www.detectomat.de
Fire alarms, Fire warning systems, Fire protection,
security systems

Fire Protection



Teckentrup
Türen · Tore · Zargen

Teckentrup GmbH & Co.KG
Tel. +49 (0) 5246/504-0
Fax +49 (0) 5246/504-30
www.teckentrup.biz · info@teckentrup.biz
Fire protection doors and gates T30/T60/T90,
security doors (resistance class WK 1 – WK 4),
sound insulated doors (up to Rw 57 dB),
bullet-proofed doors, smoke-proof doors

Time + Access



primion
Technology that cares

primion Technology AG
Steinbeisstraße 2-4 · D-72510 Stetten a.K.M.
Tel. +49(0)7573/952-0 · Fax +49(0)7573/92034
info@primion.de · www.primion.de
Time management, access control and
management, staff deployment planning,
graphic alarm management, SAP communications
solutions, pass and ID card production, Biometrics


Fire Protection



ESSER
by Honeywell

Novar GmbH a Honeywell Company
Dieselstraße 2 · D-41469 Neuss
Tel. +49(0)2137/17-600 · Fax +49(0)2137/17-286
info@esser-systems.de · www.esser-systems.de
Fire alarm systems, security systems

Fire Protection



WAGNER

WAGNER Group GmbH
Schleswigstraße 1-5 · 30853 Langenhagen
Tel. +49(0)511/97383-0 · Fax +49(0)511/97383-140
info@wagner.de · www.wagner.de
Hamburg · Berlin · Leipzig · Hannover
Mülheim/R. · Frankfurt · Stuttgart · München
Fire alarm systems and extinguishing technology,
fire prevention, integral security

Time + Access



wanzl
Zutrittskontrollen

Wanzl Metallwarenfabrik GmbH
Bubesheimer Str. 4 · 89340 Leipheim · Germany
Tel. +49(0)8221/729-6416
Fax +49(0)8221/729-90416
zutrittskontrollen@wanzl.de
www.wanzl-zutrittskontrollen.com
Personal guidance systems, barriers, security
turnstiles, electronic entrance systems

Fire Protection



HEKATRON
Ihr Partner für Brandschutz

Hekatron Vertriebs GmbH
Brühlmatten 9 · 79295 Sulzburg
Tel. +49(0)7634/500-0 · Fax +49(0)7634/6419
info@hekatron.de · www.hekatron.de
Fire alarm systems, Smoke switch systems,
Smoke alarms, Safety linkage systems



Industrial Safety

Evac+Chair International Ltd
Tel +44 (0)121-706-6744
www.evachair.co.uk · info@evachair.co.uk




European Training Division
c/o ESE International BV, DG Veldhoven
Tel. +31 (0)402553700
Tel. +49 (0)6238 984 6810 (Germany)
info@ese-int.nl
Evac+Chair Training Solutions

Hazardous Goods



DÜPERTHAL Sicherheitstechnik GmbH & Co. KG
Mainparkstr. 6-10 · 63801 Kleinostheim
Tel. 0 60 27 / 403-0 · Fax 0 60 27 / 403-121
info@dueperthal.com · www.dueperthal.com
Fire protection rooms, hazardous materials storage, safety cabinets, environmental safety, fire protection

Plant Safety



Pepperl+Fuchs GmbH
Lilienthalstraße 200 · 68307 Mannheim
Tel. 0621/776-1111 · Fax 0621/776-27-1111
fa-info@de.pepperl-fuchs.com
www.pepperl-fuchs.com
Security sensors, inductive, capacitive, opto-electronic and ultrasonic sensors, vision sensors, identification systems, interface modules

Be Part of the Section



Just send a mail to
heiko.baumgartner@wiley.com

We will be glad to advise you!

Hazardous Goods



Köttermann GmbH & Co KG
Industriestr. 2-10 · 31311 Uetze/Hänigsen
Tel. +49(0)5147/976-0 · Fax +49(0)5147/976-844
systemlabor@koettermann.de
www.koettermann.com
Hood equipment, laboratory furnishings, media connections (supply and disposal)



Dear Readers,

Who is Who in Security:

BUSINESSPARTNER is the purchasing section of qualified companies for direct contact. Under the supplier's logo you will find the company name, telephone number, fax, e-mail, web address and the core competence.

BUSINESSPARTNER on the internet:

www.PRO-4-PRO.com/security. There you will find all companies as well – with links to their websites. You belong to the most qualified suppliers as well and set great store by 20,000 opinion leaders reaching with each print issue?

Aasset Security	41	FSB	44	Pixim	55
Abus Security Center	55	Fujinon Europe	19, Inside Front Cover	Plustek Technology	55
ADT Security	7, 42	Genetec	13, 16, 53	RWE	8
Advancis	17	Geutebrück	5, 53	Samsung Techwin	11, 14, 20
AG Neovo	46	Honeywell Security	27	Sanyo	19
Apollo Fire Detectors	62, 67, Inside Back Cover	IEE	53	SeeTec	6, 20, 33
Arecont Vision	20, 39	IndigoVision	34	Senstar	6
Avigilon	37	Industrial Scientific	67	SICK	22, Front Cover
Axis Communications	15, 19, 30	Infinova	6	Sicurit	29
AxxonSoft	6, 25, 40	John Wiley & Sons	66	Siemens	58
Barco	37, Outside Back Cover	Kaba	6	SimonsVoss	57
Basler	6, 19, 50	Keeneo	55	Siqura	7, 55
Bosch	6, 19, 20, 35	L-3	53	SP Technical	64
CEM Systems	17	Legic Identsystems	53	Suprema	7
Dallmeier electronic	21, 36, 56	LRG	7	UBM	10, 16
Deister electronic	3	Milestone	20	Verint Systems	7
Detectomat	65, 68	Mintron	7	Viasys	7
DVTel	6	Morpho	19	Videotec	20, 43
Evac Chair	63, 67	Narda Safety	67	Wagner	67
EverFocus Electronics	48	Nedap	55	Winkhaus	44, 51
Eyevis	15, 38	Niche Events	52		
FLIR	24, 47	Panasonic	18		

IMPRINT

Published by

GIT VERLAG Publishing Ltd.
A Wiley Company
Roesslerstrasse 90
64293 Darmstadt · GERMANY
Tel.: +49 (0) 6151 8090 0
Fax: +49 (0) 6151 8090 144
info@gitverlag.com · www.gitverlag.com

Managing Directors

- Dr. Michael Schön
- Bijan Ghawami

Publishing Directors

- Dr. Heiko Baumgartner
Tel.: +49 (0) 61 51/80 90 137
heiko.baumgartner@wiley.com

- Steffen Ebert
Tel.: +49 (0) 61 51/80 90 130
steffen.ebert@wiley.com

Sales Managers

- Regina Berg-Jauernig
Tel.: +49 (0) 61 51/80 90 149
regina.berg-jauernig@wiley.com
- Katina Leondaris
Tel.: +49 (0) 61 51/80 90 107
katina.leondaris@wiley.com
- Dr. Michael Leising
Tel.: +49 (0) 36 03/89 31 12
- Manfred Höring
Tel.: +49 (0)61 59/50 55

Editorial

- Matthias Erler
Tel.: +49 (0) 6723/9 94 99 82
matthias.erler@wiley.com

Editorial Assistant

- Nina Wehle
Tel.: +49 (0) 61 51/80 90 214
nina.wehle@wiley.com

Production

- Christiane Potthast
- Andi Kettenbach (Layout)
- Claudia Vogel (Sales Administrator)

European Representatives

- Dave Harvett, Direct Media
Tel.: +44 (0) 121 705 2120
daveharvett@btconnect.com
- Oliver Haines, Impressive Marketing
Tel.: +44 (0) 1743 369611
impressive.marketing@virgin.net

Bank Account

Commerzbank AG Darmstadt, Germany
Account No. 01.715.501 00
Routing No. 508 800 50

GIT SECURITY is published 6 times per year.

Subscription 2011

6 issues 72.00 €, single copy 14.50 € plus postage. Pupils and Students receive a discount of 50% at sight of a valid certificate. Subscription orders valid until cancelled, notices 6 weeks before end of the year. Subscription orders can be revoked within 1 week in writing. Dispatch complaints are possible only within 4 weeks after publishing date.

The publishing house is granted the exclusive right, with regard to space, time and content to use the works/ editorial contributions in unchanged or edited form for any and all purposes any number of times itself, or to transfer the rights for the use of other organizations in which it holds partnership interests, as well as to third parties. This right of use relates to print as well as electronic media, including the Internet, as well as databases/data carriers of any kind.

All names, symbols etc. mentioned and/or printed in this issue may be registered trademarks of their respective owners.

Printrun: 20,000

Cover Page Layout

Elli Palzer · elke.palzer@wiley.com

Printed by

pva Druck und Mediendienstleistungen GmbH
D-76829 Landau/Pfalz

Printed in Germany
ISSN 2190-4367

Protecting Lives and Property Worldwide ...for a Lifetime



Our products save lives and protect property around the globe from the risk of fire; a huge responsibility and one we take very seriously.

Our Product Lifetime Guarantee provides a warranty on our products, which for detectors is 10 years (CO detectors, 5 years).

The guarantee supports our recommended working life of the product and further endorses our commitment to our customers in providing them with reliable, quality fire detection products.

www.apollo-fire.co.uk



apollo
WORLD CLASS FIRE SOLUTIONS

The product lifetime guarantee is subject to terms and conditions. For further information, please refer to our current General Conditions of Sale. 'Lifetime' refers to Apollo's recommended working life for its products, being 10 years (5 years for CO detectors).

LED has never been this cool



Liquid-cooled video walls by Barco

Barco's new generation of LED-lit rear-projection video wall systems has been optimized with a unique liquid cooling technology. Combined with Barco's Sense⁶ auto-calibration system, the new LED video walls offer:

- 30% less power consumption
- 80,000 hours lifetime
- usability in 24/7 applications
- 20% more brightness
- 4:3 and 16:9 compatibility
- display sizes from 50" to 80"



reddot design award
winner 2011

Visit us at **IFSEC**, Hall 4, booth E100

www.barco.com/cool

BARCO

Visibly yours